

SERKET



The Arachnological Bulletin of the Middle East and North Africa

Volume 19 April, 2023 Part 2

Cairo, Egypt

ISSN: 1110-502X

SERKET

Volume 19 April, 2023

Part 2 Cairo, Egypt

Contents	
P	Page
A new species of <i>Androctonus</i> Ehrenberg, 1828 from the Northern savannas of Cameroon (Scorpiones: Buthidae)	111
Wilson R. Lourenço	111
An anomaly in the genital operculum of Scorpio granulomanus Al-Saraireh, Yağmur, Abu Afifeh & Amr, 2023 (Scorpiones: Scorpionidae) Bassam Abu Afifeh & Mohammad Al-Saraireh	121
Two new species of sac spiders (Araneae: Clubionidae) from the Indian Western Himalayas Irina Das Sarkar, Shazia Quasin & Manju Siliwal	126
First record of Araneus viridiventris Yaginuma, 1969 (Araneae: Araneidae) from India with redescription of the female Kongarampilly Rajendran Shilpa, Kuzhuppilly Varghese Anis & Ambalaparambil Yaudhikumar	
An updated checklist of the spider fauna (Arachnida: Araneae) in different distr of Gujarat state, India Rajendra Singh, Akhtar Ali Khan & Aysha Ali Khan	ricts 140
Spider (Araneae) fauna of İzmir Peninsula (Çeşme, Karaburun, Urla), Türkiye Oğuz Tutar & Ersen Aydın Yağmur	197
Argiope lobata (Pallas, 1772) in Jordan (Araneae: Araneidae)	

Volume 19 (2022-2023)

Hisham K. El-Hennawy

Back issues: Vol. 1 (1987-1990), Vol. 2 (1990-1992), Vol. 3 (1992-1993), Vol. 4 (1994-1996), Vol. 5 (1996-1997), Vol. 6 (1998-2000), Vol. 7 (2000-2001), Vol. 8 (2002-2003), Vol. 9 (2004-2005), Vol. 10 (2006-2007), Vol. 11 (2008-2009), Vol. 12 (2010-2011), Vol. 13 (2012-2013), Vol. 14 (2014-2015), Vol. 15 (2016-2017), Vol. 16 (2018-2019), Vol. 17 (2019-2021), Vol. 18 (2021-2022).

Correspondence concerning subscription, back issues, publication, etc. should be addressed to the editor:

Hisham K. El-Hennawy

41, El-Manteqa El-Rabia St., Heliopolis, Cairo 11341, Egypt Postal address: E-mail: el_hennawy@hotmail.com Webpage: http://serket1987.blogspot.com *****

ISSN: 1110-502X

223

A new species of *Androctonus* Ehrenberg, 1828 from the Northern savannas of Cameroon (Scorpiones: Buthidae)

Wilson R. Lourenço

Muséum national d'Histoire naturelle, Sorbonne Universités, Institut de Systématique, Evolution, Biodiversité (ISYEB), UMR7205-CNRS, MNHN, UPMC, EPHE, CP 53, 57 rue Cuvier, 75005 Paris, France; e-mail: wilson.lourenco@mnhn.fr

Abstract

A new species of scorpion belonging to the genus *Androctonus* Ehrenberg, 1828 (family Buthidae C.L. Koch, 1837), is described on the basis of one adult female and seven males and six females juveniles collected in the savannah formations of Sanguéré-Djoi, Cameroon. The material was collected with the use of Barber traps what explains a predominance of immature individuals in the sample. This *Androctonus* population is the first record of the genus for Cameroon and can be associated with *Androctonus hoggarensis* (Pallary, 1929), species originally described from the Hoggar Mountains in Algeria. The analysis of a several morphological characters of both species confirms some differences. More conclusive however are the characteristics of endemic populations of the two species. Respectively in a Saharan Massif, major endemic centres within the Sahara desert, and in a savannah-like formation.

Keywords: Scorpion, Androctonus, new species, Savannas, Cameroon.

Introduction

In several previous publications, the taxonomical complexity of the genus *Androctonus* Ehrenberg, 1828 was strongly highlighted. This genus proved to be much more speciose than it could originally be expected; this situation was frequently attested by the relative confusion that prevailed among several species of the genus (e.g. Lourenço, 2005, 2008, 2015; Lourenço *et al.*, 2009, 2012, 2015; Ythier & Lourenço, 2022; Lourenço & El-Hennawy, 2022).

In some classical publications, Vachon (1948, 1952) largely contributed to the knowledge of North African scorpions and attempted to bring a more clear definition of the genus *Androctonus*, treating the species known at that time. His results, however, remained somewhat unsatisfactory, mainly because these were based on the study of a limited zone of North Africa. More than fifty years later, Lourenço (2005) attempted again to clarify the taxonomic position of the known populations of *Androctonus*. A few species were synonymised, some subspecies rose to the rank of species and new species were described. After the publication of this preliminary clarification on the taxonomy of *Androctonus*, more new species were added to the genus (e.g. Lourenço, 2008, 2015; Lourenço & Qi, 2006, 2007; Lourenço *et al.*, 2009, 2012, 2015). A recent synopsis was also proposed by Ythier & Lourenço (2022). In this synopsis one species was neglected: *Androctonus bartolozzii* Rossi & Merendino. This omission was subsequently corrected by Lourenço & El-Hennawy (2022).

Among the known Androctonus species some are unquestionably common, such as Androctonus australis (Linnaeus, 1758), Androctonus amoreuxi (Audouin, 1825) and Androctonus aeneas C.L. Koch, 1839, while others are rare. Contrarily to the common species, generally largely distributed in wide desert and arid zones of the Sahara and Middle East, the uncommon species present, in most cases, endemic patterns of distribution generally limited to small geographic zones which can correspond to the Saharan Massifs or less arid formations distributed in the periphery of the desert formations. Good examples are those of Androctonus hoggarensis (Pallary, 1929) described from the Hoggar Mountains in Algeria, Androctonus pallidus Lourenço, Duhem & Cloudsley-Thompson, 2012 from the Kapka Massif in Chad, Androctonus santi Lourenço, 2015 from the Aïr Mountains in Niger, Androctonus tigrai Lourenço, Rossi & Sadine, 2015 from North of Ethiopia, and more recently Androctonus agrab Ythier & Lourenço, 2022 from Western Sahara, and Androctonus tibesti Lourenço & El-Hennawy, 2022 from the Tibesti Massif in Libya (Lourenço et al., 2015; Lourenço & El-Hennawy, 2022; Ythier & Lourenço, 2022). Consequently, some Androctonus species are clearly distributed outside the Saharan Central compartment (Lourenço & Duhem, 2009) and can be endemic to some Massifs or peripheral zones which correspond to possible refuges where more mesic conditions are generally present when compared to those of the Central compartment (Lourenço & Leguin, 2014; Lourenço et al., 2012).

The Saharan Massifs in particular, such as the Hoggar, Tassili N'Ajjer, Aïr, Adrar, Tibesti, Ennedi and Kapka, have attracted the attention of naturalists since the middle of the 20th century, and a number of contributions on scorpions have been published (e.g. Vachon, 1950, 1958). However only more recent studies demonstrated that many of these local populations correspond in fact to endemic species (e.g. Lourenço, 2002, 2008; Lourenço & Leguin, 2014; Lourenço *et al.*, 2012). For these Saharan Massifs, a major synopsis was proposed by Lourenço *et al.* (2012) and will not be further discussed here.

In the present study, a new species of *Androctonus* is described from the savannah formations of the North of Cameroon (Fig. 1), attesting once more that some populations can be distributed in more mesic formations outside of the arid formations of the Sahara.

Material and Methods

Illustrations and measurements were made with the aid of a Wild M5 stereo-microscope with a drawing tube (camera lucida) and an ocular micrometer. Measurements follow Stahnke (1970) and are given in mm. Trichobothrial notations are after Vachon (1974) and morphological terminology mostly follows Vachon (1952) and Hjelle (1990).

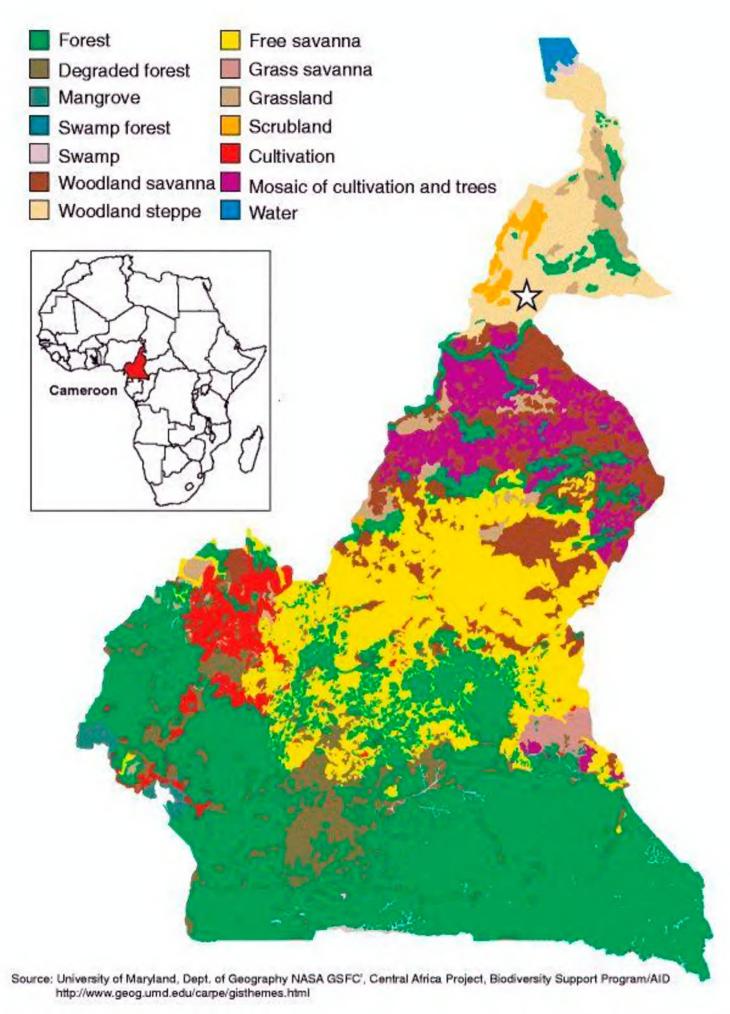


Fig. 1. Vegetation map of Cameroon with the indication of the Garoua region (white star).

Comparative material of *Androctonus hoggarensis* was examined for this study (Algeria, Hoggar Mountains, Tamanrasset, under rocks, 3-4/II/1956 (M. Gast), 1 male and 1 female; MNHN-RS-3045); Algeria, Tassili N'Ajjer, 24/I/1963 (H. Lhote), 3 males; MNHN-RS-3947). The holotype male of *Androctonus santi* was also examined (Niger, Aïr Massif, Bagzane Mountains, Zabou Rift, 24/XI/2006 (S. Sant), MNHN).

Taxonomy

Comments on some species related to the present study

Androctonus hoggarensis was described from In Ameri and In Fergane in the Hoggar Mountains in Algeria. As it was the case with most descriptions proposed by

Pallary, types of this species were not clearly designated. Consequently, it is almost certain that these are lost or at least mislead.

In his studies about the scorpion of North Africa, Vachon (1952) confirmed the distribution of *A. hoggarensis* for three Saharan Mountain ranges, Hoggar and Tassili N'Ajjer in Algeria and Aïr in Niger. Nevertheless, Vachon (1952) stated that this species could present a certain degree of variability and suggested that the study of more specimens could lead to its division in several forms. He called the attention in particular to the population distributed in the Aïr Massif, which differed by a smaller size and a distinct pattern of pigmentation. In a parallel study to that of the North African Scorpion Fauna, Vachon (1950) produced more or less a listing of several Arachnida collected in the Aïr Mountains, including a number of scorpions which he identified as *Androctonus hoggarensis*, *Androctonus amoreuxi*, *Leiurus quinquestriatus* (Ehrenberg, 1828) and *Compsobuthus werneri* (Birula, 1908).

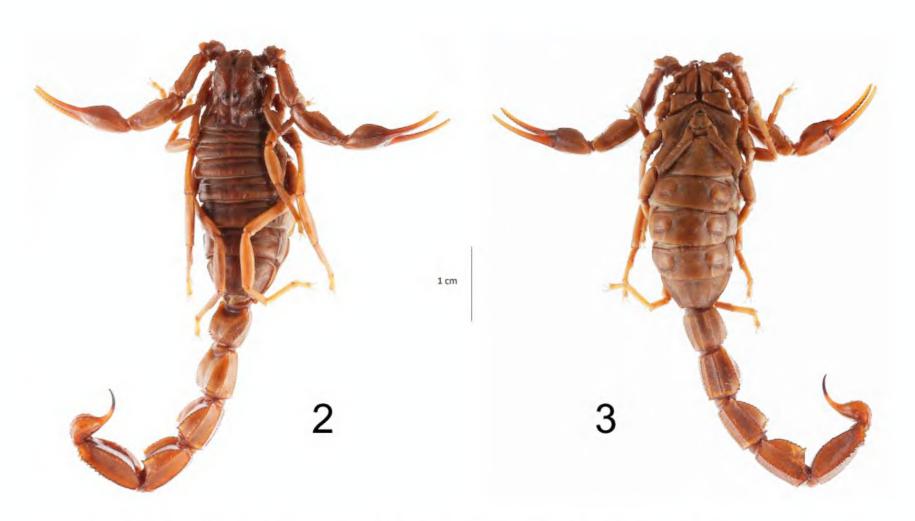
Specimens of *A. hoggarensis* from both the Hoggar and Tassili N'Ajjer Mountains are available in the collections of the Muséum in Paris; however, none of the specimens studied by Vachon (1950) from the Aïr Mountains was located. In fact, these specimens remained in the collection of IFAN, as cited by Vachon (1952; page 155).

The Aïr Massif remains a very inaccessible region and new collections in the area are rare. Some years ago, a male specimen of *Androctonus* was collected in the Aïr and initially associated to *A. hoggarensis*, but subsequently described as a new species *Androctonus santi* by Lourenço (2015).

The scorpion fauna of Northern Cameroon

Located among Central African countries, Cameroon recovers 475,000 km² and is situated between 2° and 13° of latitudes N and 8°30' and 16°10' of longitudes E (Fig. 1). The geographical position of the country allows an important diversity of natural environments with quite distinct habitats and climatic conditions, which can range from semi-deserts in the North to tropical rain forests in the South, having as a consequence an important variety of vegetation types (Letouzey, 1968). Forest covers are the most important with different gradients ranging from evergreen forest to forest-savannah mosaic; the North portion of the country is however dominated by more open vegetation types, which range from savannas to semi-arid formations (MINFOF, 2005; De Wasseige *et al.*, 2009).

The scorpion fauna of Cameroon was sporadically studied since the 19th century, leading to the description of some new species. These more or less isolated contributions continued until recently (Prendini, 2004) but concerned mainly the regions covered by forests and wet-forests. A few exceptions were studies concerning arid and savannah formations, leading to the description of two new species, *Leiurus savanicola* Lourenço, Qi & Cloudsley-Thompson, 2006 collected in a Sahel-Savannah transition area and *Scorpio savanicola* Lourenço, 2009 collected in a savannah-type formation (Lourenço, 2009; Lourenço *et al.*, 2006). Subsequently, more systematic collections, with the use of pitfall (Barber) traps, performed by colleagues of the CIRAD/IRAD in the savannah formation of the Garoua region, revealed a markedly diversity of species for this region with the description of several new species, namely: *Buthus prudenti* Lourenço & Leguin, 2012, *Butheoloides* (*Butheoloides*) *savanicola* Lourenço, 2013, *Babycurus prudenti* Lourenço, 2013 and *Pandinus camerounensis* Lourenço, 2014 (Lourenço, 2013a,b, 2014; Lourenço & Leguin, 2012). The species *Hottentotta hottentotta* (Fabricius, 1787) was also represented in several traps.



Figs. 2-3. *Androctonus cacahuati* sp. n. Habitus, female holotype. 2. dorsal aspect. 3. ventral aspect.

Description of a new species

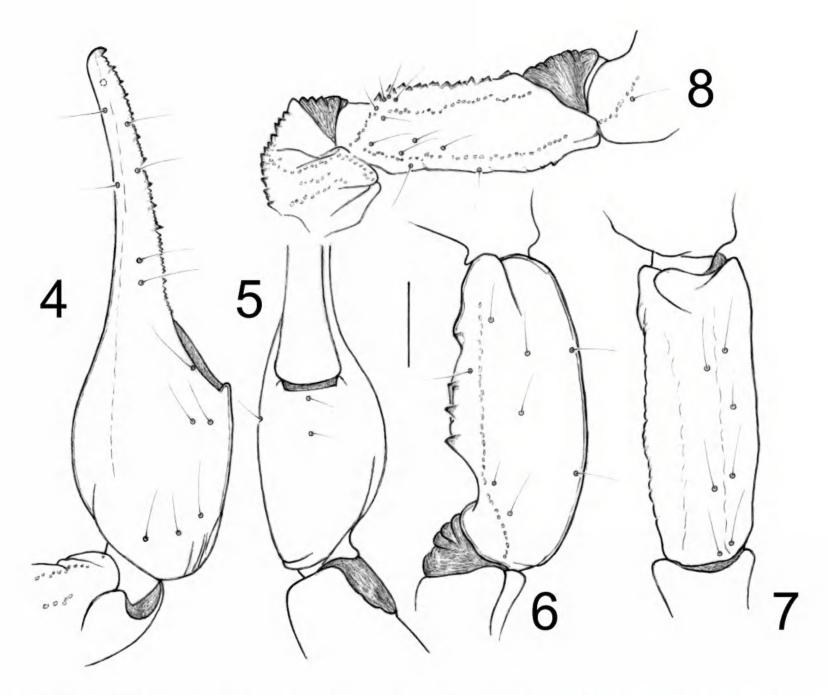
Family Buthidae C.L. Koch, 1837 Genus *Androctonus* Ehrenberg, 1828 *Androctonus cacahuati* sp. n. (Figs. 2-9, 11)

Cameroon, Sanguéré-Djoi, Guider (10°00'34.8"N, 13°54'59.1"E), VIII/2010 (leg. P. Prudent *et al.*); scorpions collected with Barber traps (Fig. 12). Female holotype; 7 male and 6 female paratypes. Material deposited in the Muséum national d'Histoire naturelle, Paris.

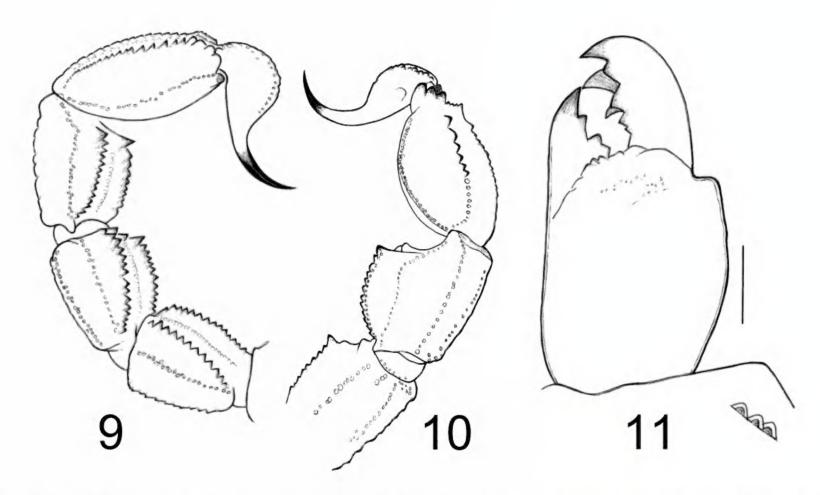
Etymology: The specific name, cacahuati (from the original Nahuati, Azteca language) refers to the cacao plant; and is placed in apposition to the generic name; it associates the new species with its chocolate colour.

Diagnosis

A scorpion of medium to large size, with adult female reaching a total length of 78.0 mm (adult males should reach a slightly smaller size). General colouration chocolate-brown with some yellowish tonalities; absence of any greenish tonality; legs paler, more to yellow; metasomal carinae brownish-yellow. Carinae and granulations on carapace and tergites moderately marked. Metasomal segments I to V only moderately enlarged distally; dorsal depression on segments I to V moderately to strongly marked; segments I-IV with dorsal spinoid granules; presence on segments III-IV of extra spinoid granules near to the junction of the segments. Anal arc with four moderately marked rounded lobes; the first two almost fused. Body and appendages with an inconspicuous setation; fixed and movable fingers with 11-11 rows of granules in most individuals; three exceptions with 11-12 rows. Pectines largely separated in both sexes; more pronounced in females with 29 to 34 teeth in males (29-30(2), 32-32(2), 32-33(2), 33-33(1), 33-34(1), 34-32(1)) and 21 to 24 teeth in females (21-21(1), 22-22(1), 22-23(1), 23-22(2), 24-23(1)).



Figs. 4-8. *Androctonus cacahuati* sp. n., female holotype. Trichobothrial pattern. 4-5. Chela. 4. dorso-external aspect. 5. ventral aspect. 6-7. Patella. 6. dorsal aspect. 7. external aspect. 8. Femur, dorsal aspect. (Scale bar: 2 mm).



Figs. 9-11. Metasoma and chelicera. 9-10. Metasomal segments and telson, lateral aspect. 9. *Androctonus cacahuati* sp. n., female holotype. 10. *Androctonus aeneas*, male neotype. 11. Chelicera of *Androctonus cacahuati* sp. n., female holotype. (Scale bar: 3 mm for metasomas; 1 mm for chelicera).

Relationships

Androctonus cacahuati sp. n., has clearly associations with Androctonus hoggarensis (Pallary, 1929) and to a lesser extent to Androctonus santi Lourenço, 2015, mainly by a more or less common pattern of colouration. However the new species can be distinguished from these two species by a number of features: (i) although the general colouration of the new species is chocolate-brown, it does not present any greenish tonalities as for the other two species (Vachon, 1952; Lourenço, 2015), (ii) a relatively larger size for the new species, (iii) metasomal segment V intensely granulated and with better marked anal lobes, (iv) chela fingers with 11-11 rows of granules, vs. 12-12 in A. santi and 13-14 in A. hoggarensis (only a few specimens showing 11-12 rows), (v) pectines in both sexes more markedly separated in the new species, (vi) dorsal carinae of metasomal segments II-IV with more strongly marked spines, and also extra spinoid granules in the junction of segments III to V.

Description based on female holotype and paratypes. Measurements after the description.

Colouration. Mainly chocolate brown with slightly yellowish tonalities. Prosoma: carapace chocolate brown; only eyes marked by dark pigment. Mesosoma: chocolate brown with slightly yellowish confluent zones. Metasomal segments I to V chocolate brown, paler than carapace and mesosoma and with some yellowish tonalities; carinae only slightly darker; telson yellowish-brown; aculeus reddish-yellow at its base and blackish at its extremity. Venter pale chocolate brown with yellowish tonalities; pectines and genital operculum yellowish-brown. Chelicerae brownish-yellow without spots; fingers brownish-yellow with dark teeth. Pedipalps brownish-yellow; carinae only slightly darker; chela hand and fingers with a uniform brownish-yellow; oblique rows of granules in the fingers dark, almost blackish. Legs dark yellow.

Morphology. Carapace moderately to weakly granular; granulations better marked anteriorly; anterior margin with an inconspicuous median concavity, almost straight. Carinae moderately to weakly marked; anterior median, central median and posterior median carinae moderately granular. All furrows moderate to weak. Median ocular tubercle slightly anterior to the centre of carapace. Eyes separated by two and half ocular diameters. Three pairs of lateral eyes. Sternum triangular and narrow, slightly longer than wide. Mesosoma: tergites moderately to weakly granular. Three longitudinal carinae moderately crenulate in all tergites; lateral carinae reduced in tergites I and II. Tergite VII pentacarinate; granulations on carinae slightly spinoid. Venter: genital operculum divided longitudinally, forming two semi-oval plates. Pectines: pectinal tooth count 24-22 in female holotype (see diagnosis for variation); middle basal lamella of the pectines not dilated. Sternites without granules, smooth with elongated spiracles; four moderately marked carinae on sternite VII; other sternites acarinate and with two vestigial furrows. Metasoma: segments I with 10 carinae, strongly crenulated; ventral strongly marked; segments II to IV with 8 carinae, crenulated; the first four segments with a smooth and moderately to strongly marked dorsal depression; segments I to IV with spinoid granules on dorsal carinae; on segments II-III some extra spinoid granules are present on the junctions of the segments; segment V with five carinae; the latero-ventral carinae crenulate with several lobate denticles; ventral median carina slightly divided on the posterior portion; anal arc composed of 13-14 inconspicuous ventral teeth and four moderately marked rounded lateral lobes. Intercarinal spaces weakly granular. Telson with some moderate granulations on ventral surface; other surfaces smooth; aculeus moderately curved and slightly longer than the vesicle; subaculear tooth absent. Cheliceral dentition as defined by Vachon (1963) for the family Buthidae; external distal and internal distal teeth approximately the same length; basal teeth on movable finger moderate but well marked and not fused; ventral aspect of both fingers and manus covered with long dense setae. Pedipalps: femur pentacarinate; patella with weakly to moderately marked carinae; only internal are more conspicuous chela with all faces weakly granular to smooth; all segments with an inconspicuous setation. Fixed and movable fingers with 11-11 oblique rows of granules; 11-12 observed for only three individuals. Internal and external accessory granules present and equally marked; three accessory granules on the distal end of the movable finger next to the terminal denticle. Legs: tarsus with numerous thin setae ventrally; tibial spur strong on legs III and IV; pedal spurs particularly strong on all legs. Trichobothriotaxy: trichobothrial pattern of Type A, orthobothriotaxic as defined by Vachon (1974). Dorsal trichobothria of femur arranged in Beta-\$\mathbf{G}\$-configuration (Vachon, 1975).

Morphometric values (in mm) of the female holotype. Total length, 78.0 (including telson length). Carapace: length, 8.7; anterior width, 6.2; posterior width, 10.1. Mesosoma length, 22.8. Metasomal segments. I: length, 5.6; width, 5.7; II: length, 6.7; width, 5.8; III: length, 7.1; width, 5.8; IV: length, 8.3; width, 5.6; V: length, 9.9; width, 5.0; depth, 4.2. Telson length, 8.9. Vesicle: width, 3.4; depth, 2.9. Pedipalp: femur length, 6.8, width, 2.4; patella length, 8.2, width, 3.4; chela length, 13.7, width, 3.3, depth, 3.5; movable finger length, 9.5.



Fig. 12. Aerial view of the region of the Sanguéré-Djoi region, Cameroon, showing the typical savannah vegetation; some agricultural fields can also be observed (photo by François-Régis Delobal).

Acknowledgment

I am most grateful to Elise-Anne Leguin (Muséum, Paris) for preparing the photos of the holotype.

References

De Wasseige C., Devers, D., Marcken de, P., Eba'a, A.R., Nasi, R. & Mayaux, P. 2009. Les forêts du Bassin du Congo: Etat des forêts 2008. Office des publications de l'Union Européenne. Luxemburg. 425 pp.

Hjelle, J.T. 1990. Anatomy and morphology. Pp. 9-63. In: Polis, G. A. (ed.). *The Biology of Scorpions*. Stanford University Press, Stanford, 587 pp.

Letouzey, R. 1968. *Etude phytogéographique du Cameroun*. Encyclopédie Biologique, Lechevalier, Paris, France. 508 pp.

Lourenço, W.R. 2002. Considérations sur les modèles de distribution et différentiation du genre *Buthus* Leach, 1815, avec la description d'une nouvelle espèce des montagnes du Tassili des Ajjer, Algérie (Scorpiones, Buthidae). *Biogeographica*, 78(3): 109-127.

Lourenço, W.R. 2005. Nouvelles considérations taxonomiques sur les espèces du genre *Androctonus* Ehrenberg, 1828 et description de deux nouvelles espèces (Scorpiones, Buthidae). *Revue suisse de Zoologie*, 112(1): 145-171.

Lourenço, W.R. 2008. A new species of *Androctonus* Ehrenberg, 1828 from Togo (Scorpiones, Buthidae). *Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg*, 15(179): 37-44.

Lourenço, W.R. 2009. Reanalysis of the genus *Scorpio* Linnaeus 1758 in Sub-Saharan Africa and description of one new species from Cameroon (Scorpiones, Scorpionidae). *Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg*, 15(181): 99-113.

Lourenço, W.R. 2013a. The remarkable peri-Saharan distribution of the genus *Butheoloides* Hirst (Scorpiones, Buthidae), with the description of a new species from Cameroon. *Comptes Rendus Biologies*, 336(10): 515-520.

Lourenço, W.R. 2013b. A new species of *Babycurus* Karsch, 1886 from Northern Cameroon (Scorpiones, Buthidae). *Arthropoda Selecta*, 22(4): 343-348.

Lourenço, W.R. 2014. Further considerations on the identity and distribution of *Pandinus imperator* (C. L. Koch, 1841) and description of a new species from Cameroon (Scorpiones: Scorpionidae). *Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg*, 17(192): 139-151.

Lourenço, W.R. 2015. A new species of *Androctonus* Ehrenberg, 1828 from the Aïr Massif in Niger (Scorpiones: Buthidae). *Serket*, 14(4): 167-175.

Lourenço, W.R. & Duhem, B. 2009. Saharo-Sindian buthid scorpions; description of two new genera and species from Occidental Sahara and Afghanistan. *ZooKeys*, 14: 37-54.

Lourenço, W.R., Duhem, B. & Cloudsley-Thompson, J.L. 2012. Scorpions from Ennedi, Kapka and Tibesti the mountains of Chad, with descriptions of nine new species (Scorpiones: Buthidae, Scorpionidae). *Arthropoda Selecta*, 21(4): 307-338.

Lourenço, W.R. & El-Hennawy, H.K. 2022. A new species of *Androctonus* Ehrenberg, 1828 from the North East portion of the Tibesti Massif in Libya (Scorpiones: Buthidae). *Serket*, 18(4): 428-440.

Lourenço, W.R. & Leguin, E.-A. 2012. A new species of the genus *Buthus* (Scorpiones: Buthidae) from Northern Cameroon. *Euscorpius*, 152: 1-9.

Lourenço, W.R. & Leguin, E.-A. 2014. Une nouvelle espèce d'*Hottentotta* Birula, 1908 pour le Massif du Hoggar en Algérie (Scorpiones, Buthidae); conséquences biogéographiques sur la répartition du genre. *Revista Ibérica de Aracnologia*, 24: 15-18.

Lourenço, W.R. & Qi, J.-X. 2006. A new species of *Androctonus* Ehrenberg, 1828 from Afghanistan (Scorpiones, Buthidae). *Zoology in the Middle East*, 38(1): 93-97.

Lourenço, W.R. & Qi, J.-X. 2007. A new species of *Androctonus* Ehrenberg, 1828 from Mauritania (Scorpiones, Buthidae). *Boletin de la Sociedad Entomológica Aragonesa*, 40: 215-219.

Lourenço, W.R., Qi, J.-X. & Cloudsley-Thompson, J.L. 2006. The African species of the genus *Leiurus* Ehrenberg, 1828 (Scorpiones: Buthidae) with the description of a new species. *Boletin de la Sociedad Entomológica Aragonesa*, 39: 97-101.

Lourenço, W.R., Rossi, A. & Sadine, S.E. 2015. More about the genus *Androctonus* Ehrenberg, 1828 (Scorpiones, Buthidae), with the description of a new species from Ethiopia. *Arachnida – Rivista Aracnologica Italiana*, 5: 11-29.

Lourenço, W.R., Ythier, E. & Leguin, E.-A. 2009. A new species of *Androctonus* Ehrenberg, 1828 from Morocco (Scorpiones: Buthidae). *Euscorpius*, 89: 1-8.

MINFOF 2005. Évaluation des ressources forestières nationales du Cameroun: 2003-2004. Unité Technique du projet d'Inventaire forestier national en collaboration avec la FAO. MINFOF, Yaoundé, Cameroun. 26 pp.

Prendini, L. 2004. On the scorpions of Gabon and neighboring countries, with a reassessment of the synonyms attributed to *Babycurus buettneri* Karsch and a redescription of *Babycurus melanicus* Kovařík. *California Academy of Sciences, Memoir*, 28: 235-267.

Stahnke, H.L. 1970. Scorpion nomenclature and mensuration. *Entomological News*, 81(12): 297-316.

Vachon, M. 1948. Etudes sur les Scorpions. III (suite). Description des Scorpions du Nord de l'Afrique. *Archives de l'Institut Pasteur d'Algérie*, 26(3): 288-316.

Vachon, M. 1950. Contribution à l'étude de l'Aïr (Mission L. Chopard et A. Villiers) - Scorpions, Pseudoscorpions et Solifuges. *Mémoires de l'Institut français d'Afrique noire*, *Zoologie*, 10: 93-107

Vachon, M. 1952. *Etudes sur les scorpions*. Publications de l'Institut Pasteur d'Algérie, 482 pp. Alger.

Vachon, M. 1958. Scorpions. Mission scientifique au Tassili des Ajjer (1949). *Travaux de l'Institut de Recherches sahariennes de l'Université d'Alger. Zoologie pure et appliqué*, 3: 177-193.

Vachon, M. 1963. De l'utilité, en systématique, d'une nomenclature des dents des chélicères chez les Scorpions. *Bulletin du Muséum national d'Histoire naturelle*, Paris, 2e sér., 35(2): 161-166.

Vachon, M. 1974. Etude des caractères utilisés pour classer les familles et les genres de Scorpions (Arachnides). 1. La trichobothriotaxie en arachnologie. Sigles trichobothriaux et types de trichobothriotaxie chez les Scorpions. *Bulletin du Muséum national d'Histoire naturelle*, Paris, 3è sér., n°140, Zool. 104: 857-958.

Vachon, M. 1975. Sur l'utilisation de la trichobothriotaxie du bras des pédipalpes des Scorpions (Arachnides) dans le classement des genres de la famille des Buthidae Simon. *Comptes Rendus des Séances de l'Académie des Sciences*, 281(D): 1597-1599.

Ythier, E. & Lourenço, W.R. 2022. A new species of *Androctonus* Ehrenberg, 1828 from Western Sahara (Scorpiones: Buthidae). *Serket*, 18(3): 239-251.

Androctonus cacahuati Lourenço, 2023

urn:lsid:zoobank.org:act:15AC73A3-8267-451F-A2F9-727B56D545C5

An anomaly in the genital operculum of *Scorpio granulomanus* Al-Saraireh, Yağmur, Abu Afifeh & Amr, 2023 (Scorpiones: Scorpionidae)

Bassam Abu Afifeh ¹ & Mohammad Al-Saraireh ²

¹ Ministry of Education, Al Rumman Secondary School, Amman, Jordan
E-mail: bassam_abu_afifeh@yahoo.com

² Oncology Department, Royal Medical Services, Amman, Jordan
E-mail: abohashem99m@gmail.com

Abstract

A case of anomaly in the genital operculum is recorded in adult female of the scorpion *Scorpio granulomanus* Al-Saraireh, Yağmur, Abu Afifeh & Amr, 2023.

Keywords: Anomaly, Scorpio granulomanus, Genital operculum.

Introduction

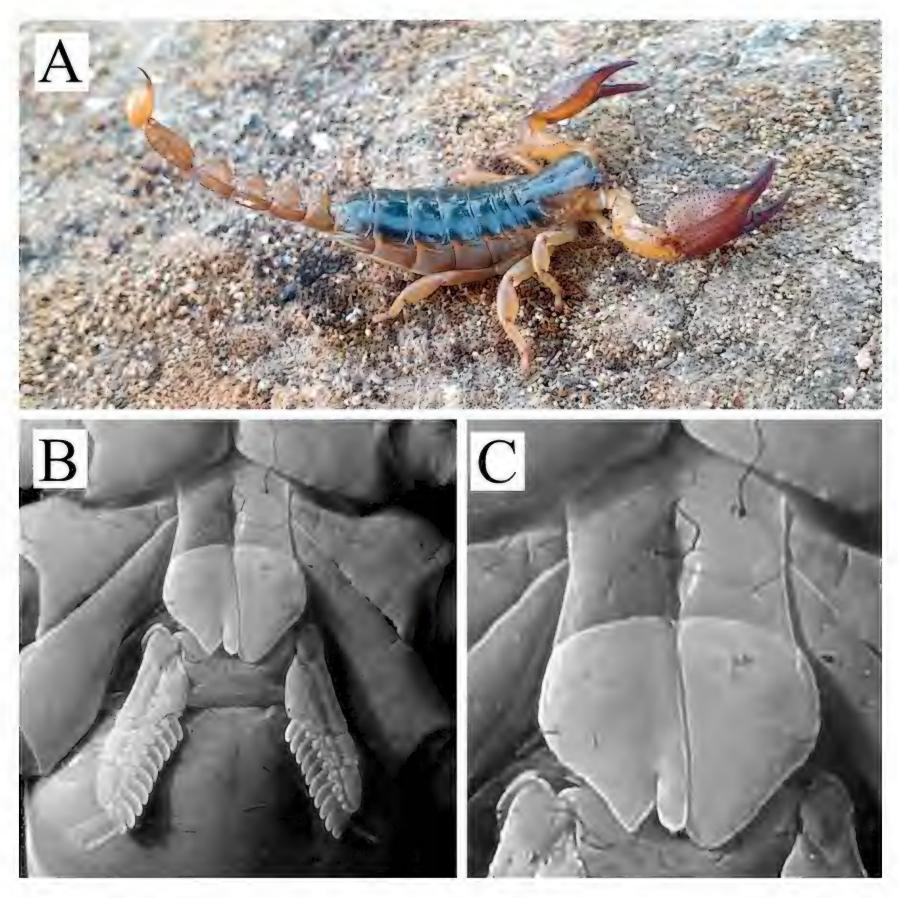
Various teratological and non-teratological morphological anomalies in scorpions have been previously reported. El-Hennawy (2011: Fig. 19) provided a very interesting drawing of a scorpion clearly had two metasomas found on the walls of the ancient Egyptian tomb of the pharaoh Seti I (1290-1279 BC) in the valley of kings, Luxor; this drawing may represent the first record of scorpion anomaly ever documented.

Anomalies on scorpion body occurring during embryonic development cause teratologic disorders (Yağmur *et al.*, 2021). These anomalies include duplications, malformations, fusion or division, or absence of body parts. Common cases are duplication of *metasoma* (Berland, 1913; Campos, 1918; Sergent, 1946; Vachon, 1952, 1953; Briseño, 1963; Williams, 1971; Sissom & Shelley, 1995; Lourenço & Hypolite, 2010; Seiter & Teruel, 2014); *prosoma* (Berland, 1913); *pedipalp* (Karataş & Kürtüllü, 2006); *pectinal organ* (Teruel & Baldazo-Monsivaiz, 2015; Yağmur *et al.*, 2022), as well as *vesicle* and *aculeus* (Shulov & Amitai, 1955; Vachon, 1972; Galvis & Flórez-D., 2016; Salabi *et al.*, 2021; Sadine, 2021; Al Qahtani & Badry, 2021). Various reported

malformations include fusion on carapace and tergites (Armas, 1976); division or fusion in tergites (Teruel, 2003; Mattoni, 2005); pedipalp fusion (Cao & Solórzano, 1991); leg malformation (Armas, 1977); pectinal malformation (Ayrey, 2011; Šarić & Tomić, 2016), pedipalp malformation (Mattoni, 2005; Graham, 2006; Jahanifard et al., 2008); vesicle malformation (Jahanifard et al., 2008); leg absence (David, 2012); and cheliceral anomalies (Teruel, 2003; Yağmur et al., 2021).

One of the most remarkable cases was recorded by Armas *et al.* (1995a,b) in *Centruroides gracilis* (Latreille, 1804): a second instar juvenile with a total of three metasomas and six telsons.

To the best of our knowledge, genital operculum malformation and anomalies haven't been recorded in scorpions previously. *Scorpio granulomanus* Al-Saraireh, Yağmur, Abu Afifeh & Amr, 2023 was recently described from Dibbeen Forest Reserve, Jordan, during further assessment of one of the female paratypes a deformity case of genital operculum has been detected.



Figs. A-C. *Scorpio granulomanus* female. A. In vivo habitus. B. Sternopectinal region. C. Sternum and genital operculum.

Material and Methods

The examined adult female of *Scorpio granulomanus* (Fig. A) was collected from Dibbeen Forest Reserve, Jerash Governorate, Jordan, 32°14'38.40"N 35°49'20.90"E, 783 m a.s.l., 20 May 2022, leg. B. Abu Afifeh & M. Al-Saraireh. It is preserved in 75% ethanol and deposited in the Department of Biology, the University of Jordan, Amman, Jordan (JUST).

Results and Discussion

The examined specimen has malformation and abnormal shape in the right genital opercular plate (Figs. B-C); the posterior protrusion that gives the genital operculum its heart-shaped is bifurcated, whereas the left part has normal shape.

In the females of family Scorpionidae the two genital plates are fused into one piece unlike males, the shape of the plates usually is a sexual dimorphism character that depends on the sex of the scorpion. In his detailed revision of the genus Scorpio in 1910, Birula noticed the difference in shape of the genital operculum between females of some subspecies of *Scorpio maurus* and used this character to distinguish between them in a female taxonomic key (Birula, 1910). Vachon, in his monograph of 1952, proposed several characters including the shape of the genital operculum as useful character to distinguish between North African subspecies of *Scorpio maurus* and he illustrated the shape of genital operculum for them (Vachon, 1952). Later in 2009, Lourenço used the shape of the genital operculum character in addition to the structure of the hemispermatophore, total size, pectinal tooth count, and even colouration patterns to elevate many African subspecies to the species rank (Lourenço, 2009).

References

Alqahtani, A.R. & Badry, A. 2021. A rare telson anomaly in *Parabuthus liosoma* (Ehrenberg, 1828) (Scorpiones: Buthidae). *Euscorpius*, 336: 1-4.

Al-Saraireh, M., Yağmur, E.A., Abu Afifeh, B. & Amr, Z. 2023. A new species of *Scorpio* from Jordan (Scorpiones: Scorpionidae). *Euscorpius*, 369: 1-17.

Armas, L.F.de 1976. Escorpiones del archipiélago Cubana. Familia Diplocentridae (Arachnida: Scorpionida). *Poeyana*, 147: 1-35.

Armas, L.F.de 1977. Anomalías en algunos Buthidae (Scorpionida) de Cuba y Brasil. *Poeyana*, 176: 1-6.

Armas, L.F.de, Cao, J. & Solórzano, L. 1995a. Escorpión con tres metasomas y seis télsones. Anales del Instituto de Biología de la Universidad Nacional Autónoma de México, Serie Zoología, 66(1): 135-136.

Armas, L.F.de, Cao, J. & Solórzano, L. 1995b. Escorpión con tres metasomas y seis télsones. *AvaCient*, 14: 39-40.

Ayrey, R.F. 2011. An anomaly of pectinal organs in *Vaejovis lapidicola* (Scorpiones: Vaejovidae). *Euscorpius*, 130: 1-6.

Berland, L. 1913. Note sur un Scorpion muni de deux queues. Bulletin de la Société entomologique de France, 18: 251-252.

Birula, A. 1910. Über *Scorpio maurus* Linné und seine Unterarten. *Horae Societatis Entomologicae Rossicae*, 39: 115-192.

Briseño, C. 1963. Presencia de un ejemplar de alacran de la especie *Centruroides noxius*, con dos colas. *Revista del Instituto de Salubridad y Enfermedades Tropicales (México)*, 23(3/4): 185-186.

Campos, F. 1918. Algunos casos teratologicos observados en los Arthropodos. *Annals of the Entomological Society of America*, 11: 97-98.

Cao, J. & Solórzano, L. 1991. Escorpión con pedipalpo anómalo. Resúmenes II Simposio de Zoología, La Habana: 48.

David, D. 2012. A seven-legged scorpion: the first teratological leg absence found in *Scorpio maurus fuscus* (Scorpiones: Scorpionidae). *Euscorpius*, 151: 1-4.

El-Hennawy, H.K. 2011. Scorpions in ancient Egypt. Euscorpius, 119: 1-12.

Galvis, W. & Flórez-D., E. 2016. A new telson teratology in the scorpion *Opisthacanthus* Peters, 1861 (Scorpiones: Hormuridae). *Arachnology*, 17(3): 157-158.

Graham, M.R. 2006. Malformed pedipalp finger dentition of the scorpion *Superstitionia donensis* (Scorpiones: Superstitioniidae). *Euscorpius*, 42: 1-4.

Jahanifard, E., Navidpour, Sh. & Masihipour, B. 2008. Pedipalps and venom vesicle anomalies in two families of scorpions (Scorpiones: Hemiscorpiidae, Buthidae) from Iran. *Pakistan Journal of Biological Sciences*, 11(2): 309-311.

Karataş, A. & Kürtüllü, M. 2006. Duplication of pedipalp segments in the scorpion *Androctonus crassicauda* (Olivier, 1807) (Scorpiones: Buthidae). *Euscorpius*, 43: 1-4.

Lourenço, W.R. 2009. Reanalysis of the genus *Scorpio* Linnaeus 1758 in Sub-Saharan Africa and description of one new species from Cameroon (Scorpiones, Scorpionidae). *Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg*, 15(181): 99-113.

Lourenço, W.R. & Hypolite, F. 2010. A new case of duplication of the metasoma and telson in the scorpion *Euscorpius flavicaudis* (DeGeer, 1778) (Euscorpiidae). *Euscorpius*, 102: 1-2.

Mattoni, C.I. 2005. Tergal and sexual anomalies in bothriurid scorpions (Scorpiones, Bothriuridae). *The Journal of Arachnology*, 33(2): 622-628.

Sadine, S.E. 2021. A remarkable bifid aculeus in *Androctonus amoreuxi* (Audouin, 1826) from central Algeria (Scorpiones: Buthidae). *Revista ibérica de aracnología*, 38: 191-192.

Salabi, F., Jafari, H. & Forouzan, A. 2021. Report of a Rare Anomaly in the Metasoma of *Hottentotta zagrosensis* (Scorpiones: Buthidae). *Iranian Journal of Science and Technology, Transactions A: Science*, 45(2): 405-408.

Sarić, M. & Tomić, J. 2016. The first record of malformed pectines in genus *Euscorpius* (Scorpiones: Euscorpiidae). *Euscorpius*, 221: 1-10.

Seiter, M. & Teruel, R. 2014. Two new cases of metasomal duplication in scorpions, with notes on their reproductive biology (Scorpiones: Buthidae). *Revista Ibérica de Aracnología*, 24: 127-129.

Sergent, E. 1946. Anomalies chez les scorpions. *Archives de l'Institut Pasteur d'Algérie*, 24(1): 80-82.

Shulov, A. & Amitai, P. 1955. A scorpion *Leiurus quinquestriatus* H. et E. with two stings. *Bulletin of the Research Council, Israel*, 5B(2): 193-194.

Sissom, W.D. & Shelley, R.M. 1995. Report on a rare developmental anomaly in the scorpion, *Centruroides vittatus* (Buthidae). *The Journal of Arachnology*, 23(3): 199-201.

Teruel, R. 2003. Nuevos casos de anomalías morfológicas en escorpiones (Scorpiones: Bothriuridae, Euscorpiidae, Hemiscorpiidae, Ischnuridae, Iuridae, Buthidae, Chactidae, Chaerilidae, Diplocentridae, Scorpionidae). *Revista Ibérica de Aracnología*, 7: 235-238.

Teruel, R. & Baldazo-Monsivaiz, J.G. 2015. Hermaphroditism, gynandromorphism, and four pectines: an extreme case of developmental anomaly in scorpions (Scorpiones: Vaejovidae). *Euscorpius*, 197: 1-7.

Vachon, M. 1952. Etudes sur les scorpions. l'Institut Pasteur d'Algérie, Algér, 482 pp.

Vachon, M. 1953. The biology of scorpions. *Endeavour*, 12: 80-87.

Vachon, M. 1972. Remarques sur les scorpions appurtenant au genre *Isometrus* H. et E. (Buthidae). A propos de l'espèce *Isometrus maculatus* (Geer) habitant l'Ile de Pâques. *Cahiers du Pacifique*, 16: 169-180.

Williams, S.C. 1971. Developmental anomalies in the scorpion *Centruroides sculpturatus*. *Pan-Pacific Entomologist*, 47(1): 76-77.

Yağmur, E.A., Kılıç, M.S. & Yılmaz, Ö. 2021. An anomaly of chelicera in *Scorpio kruglovi* Birula, 1910 (Scorpiones: Scorpionidae). *Euscorpius*, 335: 1-4.

Yağmur, E.A., Sipahioğlu, Ö., Yılmaz, Ö. & Kılıç, M.S. 2022. An anomaly of pecten in *Mesobuthus turcicus* Kovařík et al., 2022 (Scorpiones: Buthidae). *Commagene Journal of Biology*, 6(1): 116-118.

Two new species of sac spiders (Araneae: Clubionidae) from the Indian Western Himalayas

Irina Das Sarkar ^{1*}, Shazia Quasin ² & Manju Siliwal ³
Wildlife Institute of India, Dehradun, India

¹ irina.dassarkar@gmail.com , ² shaziaquasin22@gmail.com, ³ siliwal.manju@gmail.com

* Corresponding author

Abstract

The paper gives the taxonomic accounts of two new species of genus *Clubiona* from the Indian Western Himalayas, *Clubiona dorni* sp. n. and *Clubiona uniyali* sp. n. based on specimens collected from the states of Himachal Pradesh and Uttarakhand, India.

Keywords: Clubionidae, yellow-sac spiders, diversity, Himalayas, taxonomy, India.

Introduction

Sac spiders of the family Clubionidae Wagner, 1887 are represented by 659 extant species in 18 genera, with a global distribution except for polar regions (World Spider Catalog, 2023). They are foliage or ground-dwelling active hunters that generally exhibit a cylindrical body and do not build webs. Members of the family can often be spotted in self-made sac-like retreats in rolled or glued leaves, under tree barks, and inside cavities of plants (Deeleman-Reinhold, 2001).

Genus *Clubiona* Latreille, 1804 is the most speciose genus of the family, represented by 514 species and 5 subspecies globally. Twenty three species are reported from India, of which 17 are endemic. Despite its high diversity, the genus is presumed to be inadequately studied, with several single gender records, mismatched conspecific adults, lack of appropriate illustrations, and inaccessible type specimens (Zhang *et al.*, 2021). The genus, therefore, is considered paraphyletic and may be subject to future revisions. Species of the genus were sub-divided into groups by Simon (1932) based on genitalia and Deeleman-Reinhold (2001) described 6 groups of *Clubiona* species

occurring in South-East Asia. So far, 17 species-groups have been recorded (Zhang et al., 2021; Zhang et al., 2022). A detailed taxonomic study of Clubiona species from Xishuangbanna, China by Zhang et al. (2021) categorized members of the genus from the region into 8 species-groups, of which the C. corticalis (Walckenaer, 1802) group represents the most speciose group. Females of this group are characterized by small copulatory openings located anteriorly on the epigynal plate, with bursae enlarged posteriorly (Zhang et al., 2021). It is important to note that with the exceptions of C. filicata O. Pickard-Cambridge, 1874 and C. rama Dankittipakul & Singtripop, 2008, all other Indian Clubiona species are yet to be revised under appropriate groups.

During systematic elevational surveys in two states of the Indian Western Himalayas, *viz.* Uttarakhand (UK) and Himachal Pradesh (HP), new species of *Clubiona* were hand collected, subsequently identified and placed under the *C. corticalis* group. The current paper provides taxonomic details of the novel species based on female specimens.

Material and Methods

Specimens were collected from states of Uttarakhand (2010) and Himachal Pradesh (2021) by active hand collecting from ground and web retreats, followed by preservation in 70% ethanol and examination under a stereomicroscope. Epigyne of holotype was dissected and cleared using lactic acid. Photographs and measurements were taken using MICAPS camera attached to Carton DSZ-45T microscope via ToupView software. All measurements are in mm. Specimens are currently deposited at the Wildlife Information Liaison Development Society (WILD), Coimbatore, Tamil Nadu, India.

Abbreviations used in text and figure plates: A = atrium, ALE = anterior lateral eyes, AME = anterior median eyes, BS = bursa, CD = copulatory duct, FD = fertilisation duct, fe = femur, MOQ = median ocular quadrat, mt = metatarsus, OQ = ocular quadrat, pa = patella, PLE = posterior lateral eyes, PME = posterior median eyes, SH = spermathecal head, SP = spermatheca, ta = tarsus, ti = tibia, WILD = Wildlife Information Liaison Development Society.

Results

Taxonomy

Family **Clubionidae** Wagner, 1887 Genus *Clubiona* Latreille, 1804

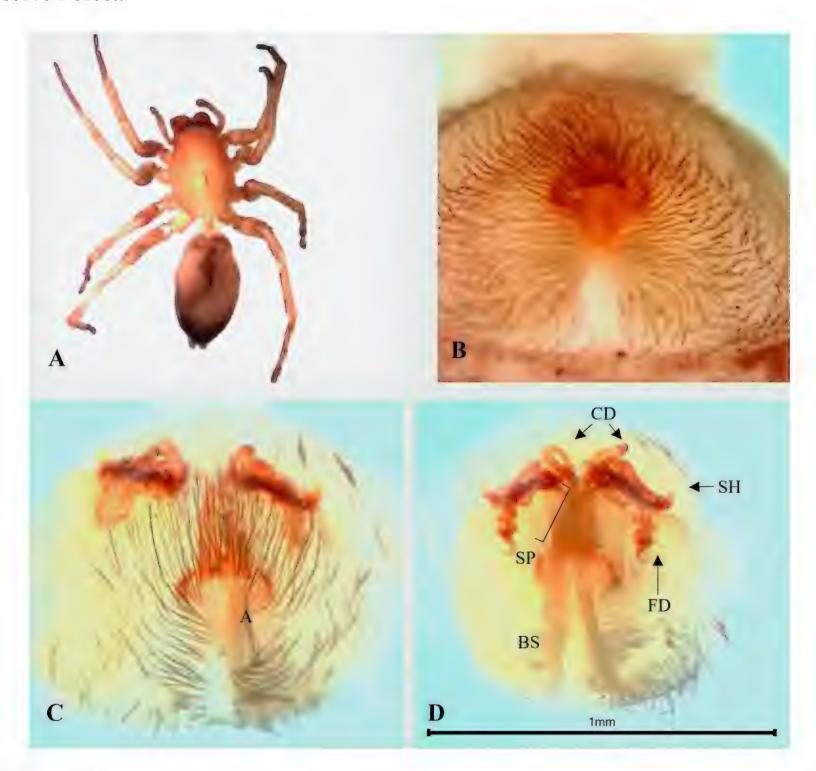
Clubiona dorni sp. n. (Figs. 1A-D)

Material examined: Holotype female, WILD-21-ARA-1620, Dorni Reserve Forest, Lahaul and Spiti, Himachal Pradesh, N32.378193, E77.277977, 3200 m., 9 August 2021, Coll. Irina Das Sarkar.

Diagnosis: The female *Clubiona dorni* sp. n. closely resembles *C. zhigangi* in having small, narrow, and elongate atrium and similarly positioned fertilisation ducts located terminally on strongly twisted and tubular spermathecae and bulbous, closely situated, transparent bursae. The new species also resembles *C. subrama* in having parallel ascending copulatory ducts that bend dorso-posteriorly to meet spermathecae. However, *C. dorni* sp. n. can be differentiated from them and all other conspecifics by combination of following characters: atrium situated at half epigynal length, inverted funnel-shaped.

Internally, copulatory ducts overhanging vertically $\frac{1}{3}^{rd}$ length of spermathecae, diverging obliquely on ventro-anterior margin; spermathecae running antero-laterally and ending in upturned spermathecal heads.

Etymology: The species epithet is a name in apposition from the type locality, Dorni Reserve Forest.



Figs. 1A-D. *Clubiona dorni* sp. n., Holotype female. A. Habitus, dorsal view. B-D. Epigyne. B-C. ventral view. D. dorsal view. (C-D. cleared). (Scale bar: 1 mm).

Description: Total length 6.12. Carapace 2.52 long, 1.80 wide, orangish, darker anteriorly, longer than wide, slightly narrowing anteriorly, covered with small pallid hairs, few bristles on caput and ocular area. Fovea distinct, red, short, longitudinal, slit like. Eyes eight in two rows; posterior row almost straight; anterior row slightly recurved. All eyes with black rim, with one side triangular black patch. Eyes: AME 0.08, PME 0.09, ALE 0.07, PLE 0.09. Inter-eye distances: PME-PLE 0.23, ALE-PLE 0.15, AME-ALE 0.05, AME-AME 0.07, PME-PME 0.25, MOQ 0.30 long, 0.41 wide, OQ 0.30 long, 0.92 wide. Chelicerae 1.11 long, 0.58 wide, reddish brown, condyles present, with two large retrolateral and four (one large, three small) prolateral teeth. Endites and labium orangish, distally pale, 0.63 long, 0.41 wide, broader distally. Labium 0.32 long, 0.35 wide, with narrow constriction basally. Sternum 1.41 long, 0.95 wide, oval, yellowish brown with darker margins covered with long brown hairs, lateral margin with small pointed extensions fitting in coxal concavities of legs. Legs yellowish orange, mt and ta darker. Legs (fe, pa, ti, mt, ta (total): I 2.05, 1.11, 1.84, 1.47, 0.74 (7.21); II 2.05, 0.84,

2.26, 1.37, 0.58 (7.10); III 1.95, 0.95, 1.53, 1.79, 0.58 (6.80); IV 2.68, 1.32, 2.32, 2.95, 0.89 (10.16). Leg formula: 4123. Abdomen 3.10 long, 1.80 wide, pale greyish, darker posteriorly, covered dorsally and ventrally with short and long pallid hairs that are visibly longer dorso-anteriorly. Visible dark patch along mid-dorsal plane running half abdomen length. Spinnertes in three pairs, as usual in clubionids.

Epigyne externally with epigynal plate wider than long, margin not rebordered, covered in small converging pallid hair; atrium small, elongate, narrow, almost half epigynal length, ending in blunt posterior extension beyond which laterally bordered by semi-circular atrial membranes that are not delimited. Internally, copulatory openings located laterally on atrium ascending parallelly, highly coiled overhanging vertically ¹/₃rd length of the spermathecae, diverging obliquely on ventro-anterior margin, and descending dorso-posteriorly to connect with spermathecae at central-axis; spermathecae tubular, sinuous, strongly twisted, runs antero-laterally, terminates in distinct upturned knob-like spermathecal heads; fertilisation ducts free-hanging on terminal end of spermathecae, recurved; bursae kidney-shaped, large, longer than wide, closely situated, translucent and wrinkled.

Habitat: The specimen was actively hand collected from a Himalayan Birch Forest (*Betula utilis*) with moist forest floor, thickly covered with leaf litter.

Distribution: Himachal Pradesh, India. Known only from the type locality.

Clubiona uniyali sp. n. (Figs. 2A-C)

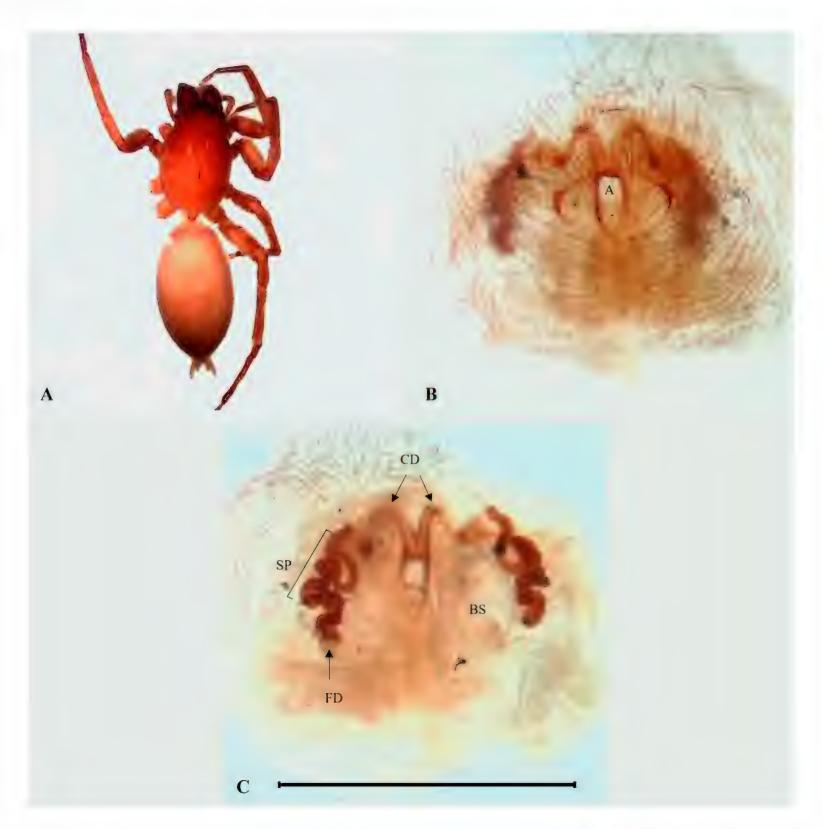
Material examined: Holotype female, WILD-10-ARA-1350, India- Lata Kharak Chamoli District, Uttarakhand, N30.50027778, E79.74597222, 3360 m, 23 August 2010, Coll. Shazia Quasin.

Diagnosis: The female *Clubiona uniyali* sp. n. resembles *C. zhigangi* and *C. dorni* sp. n. in having small, narrow, and elongate atrium; fertilisation ducts located terminally on strongly twisted tubular spermathecae and bulbous, closely situated, transparent bursae. It resembles *C. dorni* sp. n. in having semi-circular non-delimited atrial membranes emerging from anterior atrial plate and *C. zhigangi* in having long, sinuous and twisted spermathecae. It resembles *C. subrama* and *C. dorni* sp. n. in having parallel ascending copulatory ducts that bend dorso-posteriorly to meet the spermathecae. However, *C. uniyali* sp. n. differs from *C. zhingangi*, *C. subrama*, *C. dorni* sp. n. and all other *Clubiona* species by the combination of the following characters: atrium oval, situated anteriorly on ½th epigynal plate bordered by atrial membranes, situated laterally at 1.5 times atrial width; copulatory ducts posteriorly fused on origin, unconvoluted, bifurcating before ascending anteriorly and overturning on anterior-lateral edge; spermathecae moderately twisted overhanging on mid-bursae plane.

Etymology: The species epithet is a patronym in honour of Dr. Virendra Prasad Uniyal, Wildlife Institute of India, Dehardun, for his mentorship and dedicated contributions towards the documentation of various Himalayan entomofauna and arachnofauna.

Description: Total length 6.7. Carapace 2.9 long, 2.16 wide, orangish, darker anteriorly, longer than wide, slightly narrowing anteriorly, covered with small pallid hairs, few bristles on caput and ocular area. Fovea distinct, red, short, longitudinal, slit like. Clypeus 0.09 high. Eyes eight in two rows; posterior row straight; anterior row slightly recurved. All eyes with black rim, with one side triangular black patch. Eyes: AME 0.17, PME 0.13, ALE 0.17, PLE 0.11. Inter-eye distances: PME-PLE 0.2, ALE-PLE 0.09, AME-

ALE 0.07, AME-AME 0.11, PME-PME 0.13. OQ 0.42 long, 1.11 wide. MOQ 0.3 long, 0.57 wide. Chelicerae reddish brown, condyles present, with two large retrolateral and four prolateral teeth, one large and three small. Endites and labium orangish with distally pale. Endites 0.74 long, 0.24 wide, broader distally. Labium 0.47 long, 1.0 wide, with narrow constriction basally. Sternum 1.63 long, 1.1 wide, oval, yellowish brown covered with long brown hairs converging centrally, margins rebordered with long hair running along periphery, lateral margin with small pointed extensions fitting in coxal concavities of legs. Legs yellowish orange, mt and ta darker. Scopulae on all, ta and mt I and II complete for its length, mt III and IV distally. Legs (fe, pa, ti, mt, ta (total): I 2.05, 1.11, 1.84, 1.47, 0.74 (7.21); II 2.05, 0.84, 2.26, 1.37, 0.58 (7.10); III 1.95, 0.95, 1.53, 1.79, 0.58 (6.80); IV 2.68, 1.32, 2.32, 2.95, 0.89 (10.16). Leg formula: 4123. Abdomen 3.8 long, 2.37 wide, pale greyish without any pattern dorsally, ventrally covered with short and long pallid hairs intermixed with brown hairs. Spinnerets in three pairs, as usual in clubionids.



Figs. 2A-C. *Clubiona uniyali* sp. n., Holotype female. A. Habitus, dorsal view. B-C. Epigyne (cleared). B. ventral view. C. dorsal view. (Scale bar: 1 mm).

External epigyne with atrium small, longitudinally elongate, situated anteriorly on ½th epigynal plate bordered anteriorly and laterally, with non-delimited semi-circular atrial membranes; copulatory ducts originate from anterior atrial margin, basally fused, ascending parallelly and anteriorly, bifurcates at half-length and bending on anterior-

lateral edge to connect with spermathecae at central-axis; spermathecae tubular, sinuous, moderately coiled, overhanging mid-bursal plane terminating in blunt spermathecal heads; fertilisation ducts free-hanging on terminal end of spermathecae, recurved; bursae kidney-shaped, large, longer than wide, closely situated, translucent and wrinkled.

Habitat: The specimen was actively hand collected from under rocks from a high-altitude meadow habitat with a ground vegetation of *Danthonia* species.

Distribution: Uttarakhand, India. Known only from the type locality Lata Kharak.

Acknowledgments

The authors thank the Director and Dean of Wildlife Institute of India, Dehradun and the forest departments of Uttarakhand (UK) (Lata Kharak, Nanda Devi Biosphere Reserve) and Himachal Pradesh (HP) (Lahaul sub-division, Lahaul and Spiti district) for extending support during fieldwork. We thank the funding bodies that independently supported the projects across UK and HP respectively, Department of Science and Technology (SERC), New Delhi (DST No: SR/So/AS-66/2005), and Ministry of Environment, Forest and Climate Change, Government of India (AICOPTAX: 22018/60/2019-CS). We extend a special note of gratitude to Dr. V.P. Uniyal, Scientist-G, Wildlife Institute of India for being a true friend, philosopher, and guide and undertaking multiple research initiatives to further invertebrate faunal research across the Indian Himalayan Region. His supervision and perseverance towards mentoring studies on non-charismatic predatory arthropods has helped progress the field of Arachnology significantly. We also thank our field assistants and forest department officials who assisted during our intensive surveys, Mr. Manoj Pawar (UK), Mr. Satish (HP), Mr. Satpaul (HP), and Mr. Ajay (HP). We also acknowledge the spiders that were sacrificed for the study.

References

Deeleman-Reinhold, C.L. 2001. Forest spiders of South East Asia: with a revision of the sac and ground spiders (Araneae: Clubionidae, Corinnidae, Liocranidae, Gnaphosidae, Prodidomidae and Trochanterriidae). Brill, Leiden, 591 pp.

Simon, E. 1932. Les arachnides de France. Synopsis générale et catalogue des espèces françaises de l'ordre des Araneae. Tome VI. 4e partie. Roret, Paris 773-978.

World Spider Catalog 2023. *World Spider Catalog*. Version 24. Natural History Museum Bern, online at http://wsc.nmbe.ch, accessed on 08.02.2023.

Zhang, J.S., Chen, L., Ding, Y.M., Zhang, F. & Yu, H. 2022. On the *Clubiona reclusa* speciesgroup in China, with the description of *Clubiona qianlei* sp. nov. (Araneae, Clubionidae). *Zootaxa*, 5129(3): 412-421.

Zhang, J.S., Yu, H., & Li, S.Q. 2021. Taxonomic studies on the sac spider genus *Clubiona* (Araneae, Clubionidae) from Xishuangbanna Rainforest, China. *ZooKeys*, 1034: 1-163.

Clubiona dorni Sarkar, Quasin & Siliwal, 2023 urn:lsid:zoobank.org:act:AA10ED64-D2C9-423A-A675-C7102A82BE7F Clubiona uniyali Sarkar, Quasin & Siliwal, 2023 urn:lsid:zoobank.org:act:0FD6DBB4-EC1D-4F37-B22A-B6A76F771495

First record of *Araneus viridiventris* Yaginuma, 1969 (Araneae: Araneidae) from India with redescription of the female

Kongarampilly Rajendran Shilpa ¹, Kuzhuppilly Varghese Anis ² & Ambalaparambil Vasu Sudhikumar ¹*

Centre for Animal Taxonomy and Ecology, Department of Zoology, Christ College, Irinjalakuda, Kerala-680125, India

Department of Zoology, St. Joseph's College, Irinjalakuda, Kerala-680661, India * Corresponding author e-mail address: spidersudhi@gmail.com

Abstract

Revisions and detailed studies on the cosmopolitan genus *Araneus* Clerck, 1757 are carrying out in different parts of the world. Light green garden spider, *Araneus viridiventris* Yaginuma, 1969 are known from China, Japan, and Taiwan. It is recorded from India for the first time. Redescription of female genitalia with detailed photographs are presented in this study. Known distribution of this species is also mapped.

Keywords: Araneidae, light green garden spider, orb-weaver, distribution, Kerala, India.

Introduction

The angulate orb-weavers are coming under genus *Araneus* Clerck, 1757 that is one among the genera that have been firstly described during the initial period of araneofaunal studies. Genus *Araneus* has been marked its presence over the whole world except Antarctica. Currently 541 species (+15 subspecies) are included in this genus worldwide (World Spider Catalog, 2023). Of these, 18 species have been recorded from India (Caleb & Sankaran, 2023). Since the genus is one among the initially described genera, many confusions have been raised in species level classification as new techniques and methods in taxonomy have evolved. Detailed revisions and molecular studies are carrying out in different parts of the world.

Araneus viridiventris Yaginuma, 1969, commonly called as light green garden spider, was first reported from Japan (Ohno & Yaginuma, 1969). Later the species

distribution was updated from China (Yin et al., 1990) and Taiwan (Chang & Tso, 2004). Even though few photographs assumed to be A. viridiventris have been published in iNaturalist Research-grade Observations, an authentic record of the species from India has not been reported yet. Hence this study can be considered as the first record of A. viridiventris from India. Detailed descriptions on the somatic features of the species are available in the literature (Ohno & Yaginuma, 1969; Yin et al., 1990; Chang & Tso, 2004; Tanikawa, 2007). But a detailed description and photographs of the female and male genitalia are not available. Hence, we are redescribing the female of this species with detailed photographs. We could not be able to give a detailed description of the male genitalia since we were able to collect only the subadult one.

Material and Methods

The specimens of *A. viridiventris* were handpicked. The live adult female specimen was photographed in a laboratory platform within an hour after collecting. Then the specimens were transferred to small 5 ml plastic vials having 70% ethanol. Leica M205C stereomicroscope was used to explore the morphological features. Detailed photographs of the genitalia and other features were taken with the help of Leica DMC4500 digital camera attached to Leica M205C stereomicroscope. Stacking of images and measurements were taken using the software package Leica Application Suite (LAS) Windows version 4.3.0. Epigyne was dissected and internal genitalia were cleared in 10% potassium hydroxide (KOH) solution.

All measurements are in millimetres. Measurements of legs and pedipalp were taken from the proximal to distal position of each segment and recorded as follows: total length [femur, patella, tibia, metatarsus (except palp), tarsus]. After the examination, the specimens were deposited in the reference collection at the Centre for Animal Taxonomy and Ecology (CATE), Department of Zoology, Christ College, Irinjalakuda, Kerala, India.

Abbreviations used in the text and figure plates: AER = anterior eyes row, ALE = anterior lateral eye, AME = anterior median eye, CD = copulatory duct, CO = copulatory opening, d = dorsal, FD = fertilization duct, H = hood, LC = lateral condyle, MOA = median ocular area, PER = posterior eyes row, pl = prolateral, PLE = posterior lateral eye, PME = posterior median eye, PT = patellar tubercle, rl = retrolateral, S = spermatheca.

Taxonomy

Family **Araneidae** Clerck, 1757 Genus *Araneus* Clerck, 1757 *Araneus viridiventris* Yaginuma, 1969 (Figs. 1, 2A-E, 3A-E, 4A-C)

Araneus viridiventris Yaginuma, in Ohno & Yaginuma, 1969: 21-24, figs. 3a-f ($\lozenge \diamondsuit$). Araneus viridiventris Yin et al., 1990: 22, figs. 51-57 ($\lozenge \diamondsuit \diamondsuit$). Araneus viridiventris Chang & Tso, 2004: 27-28, figs. 1-4 ($\lozenge \diamondsuit \diamondsuit$). Araneus viridiventris Tanikawa, 2007: 83, figs. 245, 689-691 ($\lozenge \diamondsuit \diamondsuit$).

Material examined: India. Kerala. 1♀ (CATE823530a) from college garden, Christ College (Autonomous), Irinjalakuda, Thrissur District, 10°21′20″N, 76°12′48″E, 25m asl, coll. E.H. Vishnudas, 8 December, 2022. 1 subadult ♂ (CATE823530b) from Ranipuram forest, Kasaragod District, 12°24′45″N, 75°21′24″E, 915m asl, coll. K.R. Shilpa, 28 September, 2022.



Fig. 1. Araneus viridiventris Yaginuma, 1969 ♀, Habitus, dorsal view (alive).

Diagnosis: Araneus viridiventris can be diagnosed by the following characters: presence of distinct lateral condyle, subequal median eyes, subequal and contiguous lateral eyes which are not on tubercles, wider than longer abdomen. Females can be distinguished by a well sclerotized epigynum with U-shaped hood, globular spermatheca and copulatory opening which is at both sides of the hood. Males are diagnosed by the presence of large filamentous embolus, apex bifurcated median apophysis and a long bristle on the palpal patella (Ohno & Yaginuma, 1969: 23, figs. 3e-f).

Description of female (Figs. 1, 2A-E, 3A-E): Total body length 5.03. Cephalothorax length 2.01, width (at the widest portion) 1.89. pear shaped, longer than wide, broad thoracic area, narrow roundish cephalic region (Fig. 2A). Raised cephalic region which slants down towards the thoracic area (Fig. 2C). Brown carapace with brownish black cephalic area in the habitus. The colour fades to orange brown in alcohol. Cephalic area possesses black hairs. Few black hairs on the MOA and clypeus. Thoracic region sparsely haired. Distinct transverse fovea. Eye diameter and interdistances: AME 0.16, ALE 0.11, PME 0.14, PLE 0.10, AME-AME 0.17, AME-ALE 0.20, PME-PME 0.15, PME-PLE 0.25, AME-PME 0.13. Eight eyes in two rows. AER slightly recurved and PER

procurved. Subequal median eyes. Lateral eyes small, subequal and contiguous. Lateral eyes not on a tubercle. Each eye is surrounded by a black patch. MOA nearly square. Sternum length 0.89, width 0.73. Nearly triangular, yellowish brown, barely covered with black and grey hairs. Maxilla rectangular with distinct scopulae, orange brown with pale white inner margin densely covered with black hairs. Labium pale white coloured, triangular with few black hairs on the apex (Fig. 2B). Chelicera length 0.78, width (at base) 0.51. Short and robust with distinct boss and lateral condyle (Fig. 2D) with 3 promarginal and 3 retromarginal teeth. Black hairs on the inner margin of paturon. In the ventral view short black hairs scattered in a row towards the base of paturon. Legs orange brown where the intensity increases from femur to tarsus, covered with hairs. Leg I 8.35 [2.61, 0.99, 2.14, 1.99, 0.62], Leg II 7.66 [2.31, 0.95, 1.96, 1.89, 0.55], Leg III 3.83 [1.31, 0.49, 0.81, 0.82, 0.40], Leg IV 3.85 [1.33, 0.62, 0.70, 0.75, 0.45]. Palp 2.18 [0.61, 0.29, 0.44, 0.84]. Leg formula 1243. Spination: Leg I: femur d 2 pl3 rl 1, patella pl 1 rl 1, tibia pl 2 rl 2, metatarsus spineless, Leg II: femur d 2 pl 1 rl 1, patella rl 1, tibia pl 1 rl 1, metatarsus spineless, Leg III: femur d 2, patella d 1, tibia d 1 pl 1 rl 1, metatarsus d 3, pl 3, Leg IV: femur d 2, patella d 2, tibia d 1, metatarsus spineless. Tarsus of all legs have many short spines and hairs. Short patellar basal tubercle on the ventral side of legs I and IV (Fig. 2E).

Abdomen length 2.96, width (at the shoulder) 3.86. inverted triangle with blunt apex and slightly convex base. Bright green dorsum in the habitus and pale greyish yellow in alcohol. Dark brown pigmentation in the anterior part. Random arc shaped dark brown spots surrounded by white patches arranged in the lateral margin from anterior to posterior (Figs. 1, 2A, 2C). Four distinct pairs of dark coloured sigilla. Randomly patterned greyish transverse and vertical lines. Dark brown ventrum with four pairs of small sigilla in between epigyne and spinnerets (Fig. 2B). Deep brown spinnerets and epigyne. Highly sclerotized epigyne, heart shaped with a short U-shaped hood in the ventral view (Fig. 3C). Base of the hood is fully fused with the atrium (Figs. 3C, 3E). Hood has a median depression. CO is situated in the depressions on the sides of the hood (Fig. 3B). Highly sclerotized and globular spermatheca. Less sclerotized and foliose like FD starting from the anterior end of spermatheca in the dorsal view (Fig. 3D). CD also starts from the same point as FD. Before opening into CO, CD takes many turns which makes the path convoluted.

Description of subadult male (Figs. 4A-C): Total body length 2.61. Cephalothorax length 0.91, width (at the widest portion) 1.02. Shape and colour similar to female. Cephalic area, MOA and clypeus possess black hairs. Fovea similar to female. Eye diameter and interdistances AME 0.08, ALE 0.07, PME 0.10, PLE 0.06, AME-AME 0.13, AME-ALE 0.10, PME-PME 0.12, PME-PLE 0.16, AME-PME 0.08. Eye pattern and arrangements similar to female except AER slightly procurved. Sternum length 0.61, width 0.49, oblong, covered by grey hairs throughout the sternum. Pale yellowish-brown sternum, maxilla, and labium. Rest of the features similar to female. Chelicera length 0.47, width (at base) 0.24, similar to female. Leg I 4.25 [1.29, 0.53, 1.11, 0.93, 0.39], Leg II 3.81[1.14, 0.52, 0.90, 0.86, 0.39], Leg III 1.97 [0.68, 0.26, 0.37, 0.38, 0.28], Leg IV 2.85 [1.0, 0.36, 0.52, 0.66, 0.31]. Spination: Leg I: femur pl 1, tibia pl 1, Leg II: femur d 1, Leg III and leg IV were spineless. Leg formula and colour same as female.

Abdomen length 1.76, width (at the shoulder) 1.98. Shape, colour and markings similar to female except the strongly convex anterior portion (Fig. 4A). Three distinct pairs of sigilla are visible. Dark brown ventrum with deep brown spinnerets. Pedipalp is covered by numerous hairs and spines. It was not possible to describe the male genitalia as the collected specimen was subadult male.

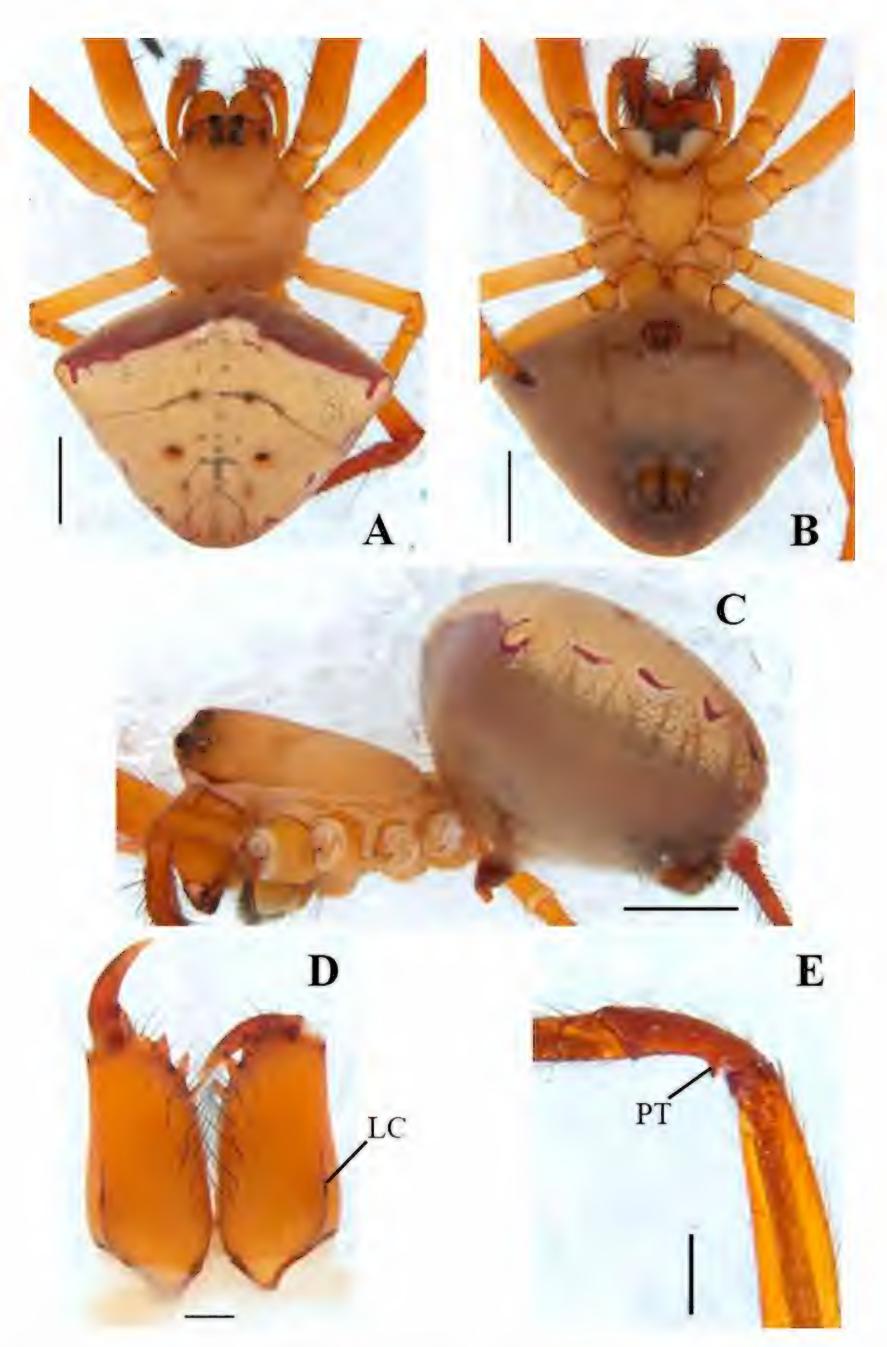


Fig. 2. *Araneus viridiventris* Yaginuma, 1969 ♀. A-C. General appearance in alcohol. A. dorsal view. B. ventral view. C. lateral view. D. Chelicerae, dorsal view. E. Leg I. (Scale bars: A-C. 1 mm, D. 0.2 mm, E. 0.5 mm).

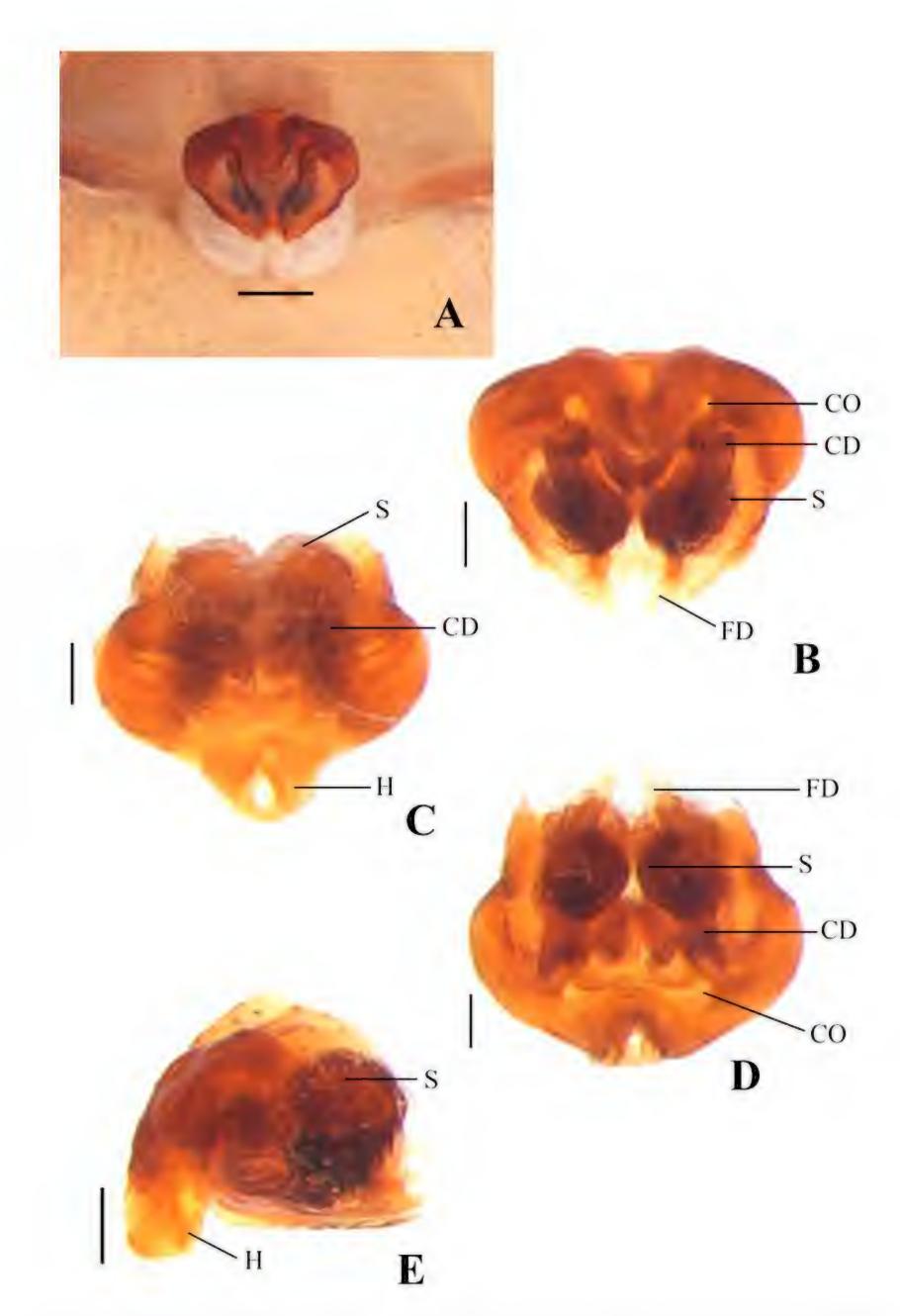


Fig. 3. *Araneus viridiventris* Yaginuma, 1969 ♀. A-E. Epigyne and internal genitalia. A. *in situ* view. B. posterior view. C. ventral view. D. dorsal view. E. lateral view. (Scale bar: A-E. 0.1 mm).

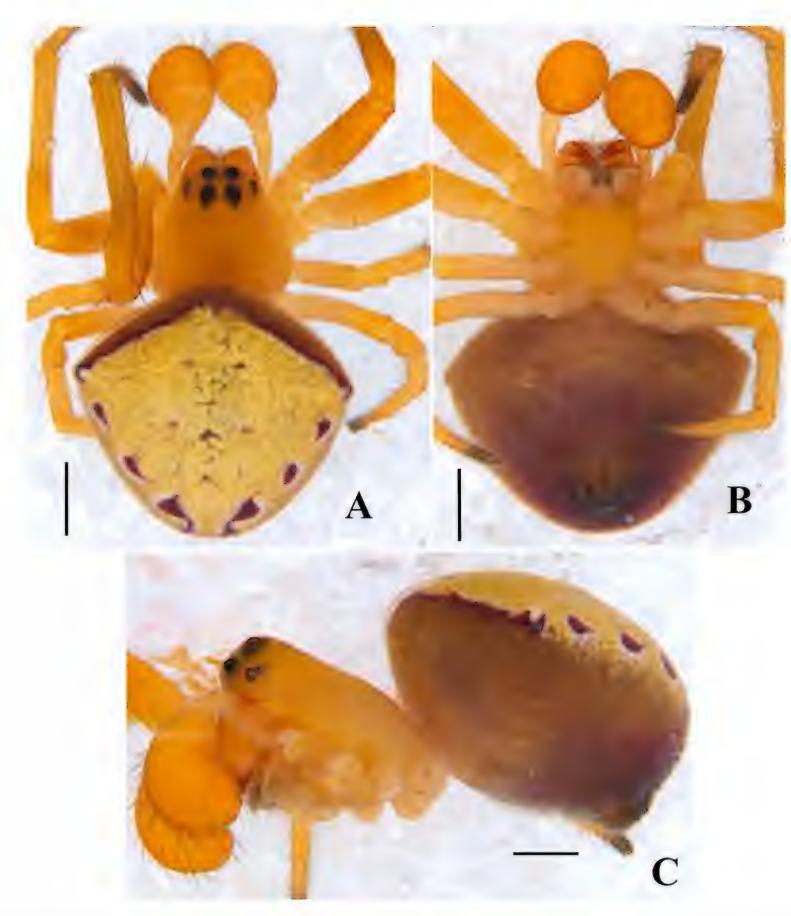


Fig. 4. Araneus viridiventris Yaginuma, 1969 sc. A-C. General appearance in alcohol. A. dorsal view. B. ventral view. C. lateral view. (Scale bar: A-C. 0.5 mm).

Distribution: Japan, China, Taiwan (Fig. 5) and India (new record).

Remarks: All the morphological features mentioned in the literature were matching with the current specimen and hence confirmed the species. But an exception was there with the height of cephalic and thoracic regions. In the first description of *A. viridiventris*, Yaginuma (1969) mentioned the statement 'head as high as thorax' (Ohno & Yaginuma, 1969: 21). This feature was not mentioned in rest of the literature. In our specimen of *A. viridiventris* the cephalic region is higher than the thoracic region and the cephalic region slants down towards the thoracic region (Figs. 2C, 4C).

Natural history: Both the male and female specimens were found in the retreat near the slight horizontal web. Male was found in a tropical forest habitat whereas the female was found in man-made garden. Both habitats were humid and specimens were collected in sunny days. This concludes that the species prefers a complex habitat with humid and warm climate.

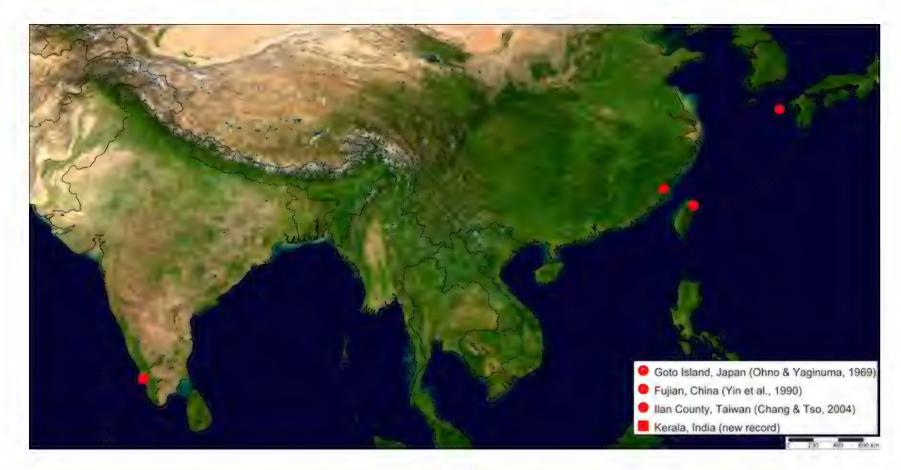


Fig. 5. Distribution map of Araneus viridiventris Yaginuma, 1969.

Acknowledgments

The authors are grateful to Rev. Fr. Dr. Jolly Andrews CMI, Principal, Christ College (Autonomous), Irinjalakuda, Kerala, India for providing all facilities for undertaking this work. We express our gratitude to other research scholars of CATE for their support. The authors also acknowledge the funding rendered by DST SERB Major Research Project EEQ/2021/000453 for the facilities used in this study. We are also thankful to the Kerala State Council for Science, Technology & Environment (KSCSTE) for providing financial assistance for this study as Junior Research Fellowship (No. KSCSTE/216/2021-FSHP-LS).

References

Caleb, J.T.D. & Sankaran, P.M. 2023. *Araneae of India*, version 2023, online at https://indianspiders.in, accessed on 29.01.2023.

Chang, Y.H. & Tso, I.M. 2004. Six newly recorded spiders of the genera *Araneus*, *Larinia*, *Eriophora*, *Thanatus*, *Portia* and *Dolichognatha* (Araneae: Araneidae, Philodromidae, Salticidae and Tetragnathidae) from Taiwan. *Acta Arachnologica*, 53(1): 27-33.

Clerck, C. 1757. Aranei Svecici. Svenska spindlar, uti sina hufvud-slågter indelte samt under några och sextio särskildte arter beskrefne och med illuminerade figurer uplyste. Laurentius Salvius, Stockholmiae, 154 pp.

Ohno, M. & Yaginuma, T. 1969. The spider fauna of the Goto islands belonging to Kyushu, Japan. *Journal of Tokyo University for General Education* (nat. Sci.), 12: 7-24.

Tanikawa, A. 2007. An identification guide to the Japanese spiders of the families Araneidae, Nephilidae and Tetragnathidae. Arachnological Society of Japan, 121 pp.

World Spider Catalog 2023. *World Spider Catalog*. Version 24. Natural History Museum Bern, online at http://wsc.nmbe.ch, accessed on 29.01.2023.

Yin, C.M., Wang, J.F., Xie, L.P. & Peng, X.J. 1990. New and newly recorded species of the spiders of family Araneidae from China (Arachnida, Araneae). In: Spiders in China: One Hundred New and Newly Recorded Species of the Families Araneidae and Agelenidae. Hunan Normal University Press, pp. 1-171.

An updated checklist of the spider fauna (Arachnida: Araneae) in different districts of Gujarat state, India

Rajendra Singh ^{1*}, Akhtar Ali Khan ² & Aysha Ali Khan ²

¹ Department of Zoology, Deendayal Upadhyay University of Gorakhpur, U.P., India ² Division of Entomology, Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir, Shalimar, Srinagar, Kashmir, India * Corresponding author e-mail address: rsinghpu@gmail.com

Abstract

In this article, an updated checklist of spider diversity in the Gujarat state of India is presented. A total of 533 species of spiders described under 190 genera belonging to 41 families are enlisted that have been recorded/described from only 25 out of 33 districts of Gujarat, India. A total of 178 species belonging to 43 families recorded from different districts of Gujarat were identified only up to the generic level. The maximum number of species of spiders were recorded from Mehsana district (215 species, 107 genera) followed by Bhavnagar (206 species, 112 genera), Sabarkantha (192 species, 100 genera), Navsari (167 species, 89 genera), Panchmahal (165 species, 99 genera), Dang (162 species, 87 genera), Banskantha (127 species, 81 genera), Junagadh (121 species, 44 genera), Anand (118 species, 74 genera), Vadodara (118 species, 51 genera) and Surendranagar (108 species, 56 genera) and less number of species in other districts. Also, 31 species in 27 genera and 17 families recorded in 13 districts of Gujarat seem to be misidentified. Among the families, Araneidae is the most abundant family which comprises 79 species belonging to 24 genera and is distributed in 23 districts out of 33 districts in Gujarat followed by Lycosidae (68 species, 10 genera, 20 districts), Salticidae (64 species, 36 genera, 20 districts), Gnaphosidae (51 species, 14 genera, 17 districts), Thomisidae (41 species, 16 genera, 18 districts) and Theridiidae (35 species, 16 genera, 21 districts). So far, no faunal surveys of spiders have been conducted in 8 districts of Gujarat. Most of the national parks and wildlife sanctuaries, forest areas, agricultural fields, orchards, human dwellings etc. within the state still await intensive and extensive surveys to record the spider fauna.

Keywords: Spiders, Araneae, checklist, faunal distribution, Gujarat, India.

Introduction

Spiders (Arachnida: Araneae) are distributed throughout the world except in the arctic zones. They are highly ecologically significant, yet are least accepted by humans because of the commonness of arachnophobia in public. Almost all spiders are predators and more than 99.9% of the food includes insects. The spiders have several ecological guilds such as orb web weavers, stalkers or jumping spiders, ground runners foliage runners, space builders, ambushers, etc. It implies that the spiders have several tactics to capture prey depending upon the species, habitats and kind of food which help them to suppress insect pests more successfully than more homogenous communities like insect predators and parasitoids (Uetz, 1992). In addition, spiders are relatively resistant to starvation and desiccation. Globally, World Spider Catalog listed 50,947 species in 4,310 genera belonging to 132 families (World Spider Catalog, 2023). In India, Caleb & Sankaran (2023) listed only 1932 species belonging to 492 genera in 61 families, however, Singh & Singh (2021a) compiled 2344 species under 596 genera comprising 65 families, though many species recorded by several authors have been marked by them as the case of misidentification. However, there are several species in the wild and in museums that still await description and classification.

Araneological studies in Gujarat date back to Simon (1897) with the description of a single species *Drassodes cerinus* Simon, 1897 from north Gujarat. Later, Pocock described two species (*Lycosa wroughtoni* Pocock, 1899 and *Peucetia graminea* Pocock, 1900 from Valsad) and recorded three species, *Argiope aemula* (Walckenaer, 1841) and *Olios wroughtoni* (Simon, 1897) from Valsad, and *Selenops radiatus* Latreille, 1819 from north Gujarat. After two decades, Sherriffs (1919) and Gravely (1931) recorded *Oxyopes wroughtoni* Pocock, 1901 from Valsad.

Then, after almost four decades, between the years 1971 to 1990, Patel and his coworkers extensively and intensively studied the spider fauna of Gujarat and described/recorded hundreds of species from different locations in the state (Patel, 1971, 1973, 1975a, b, c, 1978a, b, 1985, 1987a, b, 1988a, b, c, d, 1989, 2002, 2003; Patel & Patel, 1972, 1973a, b, 1975a, b; Patel & Pillai, 1988; Patel & Reddy, 1990). Yadav et al. (2017) compiled a preliminary checklist of spiders of Gujarat and mentioned the presence of 415 species in 169 genera and 40 families including species identified only up to generic level, which was incomplete and full of errors (Vyas & Parasharya, 2018). In the current century, several workers have surveyed different locations, vegetable fields, agricultural crops, parks, sanctuaries etc. in several districts and prepared checklists and added some more species from the state, e.g. Ahmedabad (Prajapati et al., 2018), Amreli (Dal & Trivedi, 2020), Anand (Bhatt, 2014; Raghunandan et al., 2021), Dang (Mehta, 2001; Siliwal et al., 2003a; Suther et al., 2017), Junagadh (Chatrabhuj, 2007; Parikh et al., 2008), Kheda (Bhatt, 2014), Mehsana (Parmar & Patel, 2015, 2017, 2018; Parmar, 2018a, b, 2020, 2021; Prajapati et al., 2023), Narmada (Bhatt, 2008), Navsari (Thumar, 2019), Patan (Parmar et al., 2023), Panchmahal (Solanki & Kumar, 2015; Yadav, 2019; Yadav & Kumar, 2019; Solanki et al., 2020), and Vadodara (Kumar & Shivakumar, 2004). In addition, several species were either described or recorded sporadically from different places of Gujarat.

The inventory of fauna and flora of a given region is one of the primary objectives for setting up a biodiversity conservation action plan for that region. The conservation status of 99.5% of the spider species has not yet been evaluated by the IUCN globally (Seppälä *et al.*, 2018). Despite recent research works on the diversity and distribution of spiders in India, their number is insufficient as compared to the other parts of the world (Singh, 2022a).

The survey of the literature demonstrated that the existing information on the spider diversity in Gujarat is scattered and 8 districts have not yet been surveyed for faunal distribution of spiders. Recently, the checklist of spider fauna have been prepared from Indian States such as Andhra Pradesh (Singh & Sharma, 2022a), Bihar & Jharkh (Singh & Singh, 2021b), Chhattisgarh (Singh & Singh, 2021c), Goa (Singh & Singh, 2022a), Haryana, Himachal Pradesh, Punjab, Chandigarh & Delhi (Singh & Singh, 2021d), Jammu, Kashmir & Ladakh (Singh *et al.*, 2023), Karnataka (Singh, 2022a), Madhya Pradesh (Singh & Sharma, 2022b), Maharashtra (Singh, 2022b), Odisha (Singh, 2022c), northeast India (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura) (Singh & Singh, 2021e), Rajasthan (Singh & Singh, 2022b), Telangana (Singh & Sharma, 2022c), Uttar Pradesh and Uttarakhand (Singh & Singh, 2022c) and Andaman, Nicobar & Lakshadweep (Singh & Singh, 2022d). The present article provides an updated checklist of the fauna of spiders in Gujarat State of India.

Material and Methods

Study area

Gujarat (altitude: 20°06' to 24°42'N; longitude: 68°10' to 74°28'E; area: 196,030 km²) is a state of the western coast of India with a coastline of about 1,600 km being the longest in the country. It is bordered by Rajasthan to the northeast, Madhya Pradesh to the east, Maharashtra to the southeast, Dadra and Nagar Haveli and Daman and Diu to the south, and the Arabian Sea and the Pakistani province of Sindh to the west. Gujarat has a diverse range of geographic features and sceneries. It has several rivers flowing across its alluvial plains. Narmada (the largest one), Tapi, Mahi and Sabarmati are the three main rivers of Gujarat. The eastern borders of Gujarat have fringes of low mountains, the Aravalli, Sahyadri (Western Ghats), Vindhya and Saputara. There are three main geographical regions, the mainland, the peninsular region of Saurashtra and the Kutch region which is a large area of desert land (Rann of Kutch). Based on the climatic variation, Gujarat is divided into eight agro-climatic zones by the Agriculture and Cooperation Department, Government of Gujarat (Yadav et al., 2017). The state has four National Parks and twenty-three wildlife sanctuaries with rich flora and fauna. The plains of Gujarat are very hot and dry in summer (maximum 49°C, minimum 30°C) and cold and dry in winter (maximum 29°C, minimum 12°C). Summer is milder in the hilly regions and the coast. Most of the state receives scanty rainfall, but Southern Gujarat and the hilly regions receive heavy rainfall during the monsoons. For administration, Gujarat is divided into 33 districts.

The present checklist is based on the published literature on spiders, e.g. books, book chapters, journals, proceedings of conferences, Records and Fauna Series of the Zoological Survey of India, Kolkata, a few authentic theses, websites (only research-grade contents), and World Spider Catalog (World Spider Catalog, 2023) up to March 12, 2023. In most of the recent past literature, there are several errors in the scientific names of the spiders because of their modified status and other nomenclatural decisions and clarification. In the present checklist, attempts have been made to correct these errors following World Spider Catalog (2023). The species identified only up to the generic level and seemingly misidentified species are excluded from the state list and are given separately. For synonymy and endemism of valid spider species, World Spider Catalog (2023) should be consulted. In few cases, the locations of spider species are corrected, particularly of those spiders that were described/recorded during the British period before the formation of Gujarat in 1947 by incorporating some part of the adjoining states, Maharasthra.

Results and Discussion

The total number of species recorded in different districts of Gujarat are displayed in Table (1), the species identified only up to the generic level are presented in Table (2) while seemingly misidentified species are listed in Table (3).



Fig. 1. Number of spider species recorded and/or described from different districts of Gujarat state of India.

In the present compilation, a total of 533 species of spiders described under 190 genera belonging to 41 families were recorded in 25 districts of Gujarat out of 33 districts (Table 3). The biodiversity of spiders is more in 10 districts of the state of eastern part (Anand, Banaskantha, Bhavnagar, Dang, Mehsana, Navsari, Panchmahal, Sabarkantha, Surendranagar, Vadodara) where more than 100 species were recorded. However, several areas are still virgin regarding the faunal survey programmes and need intensive and extensive surveys in those areas by enthusiastic workers. Yadav et al. (2017) listed only 415 species of spiders in Gujarat under 169 genera and 40 families. Since then, several new species or records have been added. The maximum number of species of spiders was recorded from Mehsana (215 species, 107 genera) followed by Bhavnagar (206 species, 112 genera), Sabarkantha (192 species, 100 genera), Navsari (167 species, 89 genera), Panchmahal (165 species, 99 genera), Dang (162 species, 87 genera), Banskantha (127 species, 81 genera), Junagadh (121 species, 44 genera), Anand (118 species, 74 genera), Vadodara (118 species, 51 genera) and Surendranagar (108 species, 56 genera) (Table 4, Fig. 1) and less than 100 species of spiders in other districts. No faunal survey of spiders so far conducted in 8 districts of Gujarat shown in red colour in Fig. (1). Most of the national parks and wildlife sanctuaries, forest areas, agricultural fields, human dwellings

etc. of Gujarat still await intensive and extensive survey programmes to record a near complete spider fauna. Total 178 species belonging to 42 families of spiders recorded from different districts of Gujarat were identified only up to the generic level (Table 2) and are excluded from the total list of spiders of Gujarat. It is possible that some of them may be new species. Including them, a total of 47 families are represented in Gujarat (Table 4). Also, 31 species in 27 genera and 17 families recorded in 13 districts of Gujarat seem to be misidentified as these species are not recorded in India (World Spider Catalog, 2023; Caleb & Sankaran, 2023) (Table 3) and hence, are excluded from the main list.

In few districts, some authors reported several species of spiders without giving their specific names. For example, Gosai & Tatmuiya (2019) observed 101 species, 51 genera and 11 families in Jamnagar district and Patel & Patel (2015) recorded 90 species, 46 genera, 18 families of spiders from Mehsana district without giving their specific names. Such records are useless for faunal diversity.

Among the families, Araneidae is the most abundant family which comprises 79 species belonging to 24 genera and is distributed in 23 districts out of 33 districts in Gujarat followed by Lycosidae (68 species, 10 genera, 20 districts), Salticidae (64 species, 36 genera, 20 districts), Gnaphosidae (51 species, 14 genera, 17 districts), Thomisidae (41 species, 16 genera, 18 districts) and Theridiidae (35 species, 16 genera, 21 districts). Representation of other families is moderate to poor. Though, Sparassidae is a small family including only 19 species in 5 genera, is distributed in 18 districts of Gujarat (Table 5).

The spider fauna of Gujarat overlaps the fauna of neighbouring states, such as Rajasthan (Singh & Singh, 2022b), Madhya Pradesh (Singh & Sharma, 2022b) and particularly Maharashtra (Singh, 2022b). A perusal of checklists of the spider fauna of different states (Singh, 2022a) reveals that the biodiversity of spiders in Gujarat is comparatively high. It ranks first in the number of families; fifth in the number of genera after Maharashtra (247 genera, Singh, 2022b), Kerala (236 genera, personal data), West Bengal (215 genera, personal data) and Uttarakhand (202 genera, Singh & Singh, 2022c); and second in the number of species after Maharshtra (785 species, Singh, 2022b).

Table 1. List of species of spiders recorded/described from different districts of Gujarat.

Family/Species	Distribution in districts	References
1. Agelenidae		
<i>Agelena gautami</i> Tikader, 1962	Panchmahal	Yadav, 2019
Agelena shillongensis Tikader, 1969	Kachchh	Parmar et al., 2015
2. Araneidae		
<i>Arachnura angura</i> Tikader, 1970	Mehsana	Parmar, 2021
Araneus bilunifer Pocock, 1900	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1975b, 1985, 2003; Sebastian, 1988; Patel & Vyas, 2001; Siliwal <i>et al.</i> , 2003b; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012; Parmar, 2018a, 2021
Araneus cyrtarachnoides (Keyserling, 1887)	Anand	Patel, 1971
Araneus ellipticus (Tikader & Bal, 1981)	Anand, Banaskantha, Kachchh, Mehsana,	Parmar, 2013, 2018a, b, 2020; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2015;

nily/Species	Distribution in districts	References
	Navsari, Sabarkantha	Patel <i>et al.</i> , 2013; Ramanujam <i>et al.</i> , 2019; Raghunandan <i>et al.</i> , 2021
Araneus pahalgaonensis Tikader & Bal, 1981	Dang	Siliwal et al., 2003b
Araneus panchganiensis Tikader & Bal, 1981	Navsari, Junagadh	Chatrabhuj, 2007; Thumar, 2019
Araniella nympha (Simon, 1889)	Kheda	Pradipkumar, 2009
Argiope aemula (Walckenaer, 1841)	Bharuch, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Navsari, Panchmahal, Vadodara, Valsad	Pocock, 1900; Siliwal, 2000; Patel, 1985, 2003; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004; Parikh <i>et al.</i> , 2008; Patel <i>et al.</i> , 2012; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Solanki <i>et al.</i> , 2020
Argiope anasuja Thorell, 1887	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Rajkot, Panchmahal, Patan, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Sebastian, 1988; Patel & Vyas, 2001; Siliwal, 2000; Siliwal et al., 2003b; Kumar & Shivakumar, 2004; Patel et al., 2012; Vachhani et al., 2012; Parmar, 2013, 2021; Parma & Acharya, 2015; Parasharya & Pathan, 2013; Solanki & Kumar, 2015; Yadav & Kumar, 2019; Yadav & Kumar, 2019; Parmar et al., 2023
Argiope catenulata (Doleschall, 1859)	Ahmedabad	Chandra et al., 2021
Argiope lobata (Pallas, 1772)	Bhavnagar, Dang, Junagadh	Patel, 1971, 1985; Chatrabhuj, 2007
Argiope minuta Karsch, 1879	Bhavnagar, Navsari	Patel, 1985, 2003
Argiope pulchella Thorell, 1881	Anand, Dahod, Dang, Junagadh, Kachchh, Mehsana, Navsari, Sabarkantha, Surendranagar, Vadodara	Patel, 1971; Sebastian, 1988; Dhulia Yadav, 1991; Siliwal, 2000; Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parikh <i>et al.</i> , 2008; Patel <i>et al.</i> , 2012; Parmar <i>e al.</i> , 2015; Prajapati <i>et al.</i> , 2018; Ramanujam <i>et al.</i> , 2019; Parmar, 202 Raghunandan <i>et al.</i> , 2021
<i>Argiope trifasciata</i> (Forskål, 1775)	Bhavnagar	Patel, 1985
Bijoaraneus mitificus (Simon, 1886)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha, Surendranagar	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Mehta, 2001; Chatrabhuj, 2007; Parmar, 2013, 2018a, 2020, 2021; Bhatt, 2014; Parmar & Acharya, 2015; Parmar et a 2015; Solanki & Kumar, 2015; Prajapati et al., 2016c; Yadav et al., 2017; Thumar, 2019; Solanki et al., 2020
Chorizopes anjanes Tikader, 1965	Anand, Bhavnagar	Tikader, 1982; Patel, 1985
Chorizopes khanjanes Tikader, 1965	Anand, Bhavnagar, Dang, Junagadh, Navsari, Vadodara	Patel, 1971, 1985, 2003; Siliwal, 200 Chatrabhuj, 2007
Chorizopes khedaensis Reddy & Patel, 1993	Kheda	Reddy & Patel, 1993; Siliwal, 2000

nily/Species	Distribution in districts	References
Chorizopes pateli Reddy & Patel, 1993	Kheda	Reddy & Patel, 1993
Chorizopes stoliczkai O. Pickard-Cambridge, 1885	Mehsana	Parmar, 2021
Cyclosa bifida (Doleschall, 1859)	Anand, Banaskantha, Junagadh, Mehsana, Panchmahal, Patan, Sabarkantha	Parikh <i>et al.</i> , 2008; Parmar, 2013, 2018a, 2020, 2021; Parmar & Patel, 2017; Yadav, 2019; Parmar <i>et al.</i> , 2023
Cyclosa confraga (Thorell,1892)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Tikader, 1982; Patel, 1985, 2003; Sebastian, 1988; Siliwal, 2000; Patel & Vyas, 2001; Siliwal <i>et al.</i> , 2003a; Kumar & Shivakumar, 2004; Patel <i>et al.</i> , 2012; Parmar <i>et al.</i> , 2015; Solanki & Kumar, 2015; Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Parmar, 2021; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Yadav, 2019; Solanki <i>et al.</i> , 2020
Cyclosa hexatuberculata Tikader, 1982	Ahmedabad, Anand, Bhavnagar, Dang, Junagadh, Kheda, Navsari, Panchmahal, Patan, Vadodara	Patel, 1985; Siliwal, 2000; Mehta, 2001; Chatrabhuj, 2007; Parmar, 2013; Parasharya & Pathan, 2013; Bhatt, 2014; Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Cyclosa insulana (Costa, 1834)	Anand, Banaskantha, Dang, Mehsana, Navsari, Vadodara	Patel, 1971; Sebastian, 1988; Siliwal, 2000; Patel, 2003; Thumar, 2019
Cyclosa moonduensis Tikader, 1963	Ahmedabad, Anand, Bhavnagar, Dang, Kheda, Navsari, Panchmahal, Rajkot	Patel, 1985; Mehta, 2001; Patel & Vyas, 2001; Bhatt, 2014; Solanki & Kumar, 2015; Yadav <i>et al.</i> , 2017; Thumar, 2019; Solanki <i>et al.</i> , 2020; Raghunandan <i>et al.</i> , 2021
Cyclosa mulmeinensis (Thorell, 1887)	Bhavnagar, Dang, Junagadh, Mehsana, Navsari, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Sebastian, 1988; Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Chatrabhuj 2007; Yadav <i>et al.</i> , 2017; Thumar, 2019
Cyclosa neilensis Tikader, 1977	Ahmedabad, Navsari	Thumar, 2019; Chandra et al., 2021
Cyclosa quinqueguttata (Thorell, 1881)	Navsari	Thumar, 2019
Cyclosa simoni Tikader, 1982	Kheda, Vadodara	Siliwal, 2000; Bhatt, 2014
Cyclosa spirifera Simon, 1889	Ahmedabad, Amreli, Bhavnagar, Kheda, Navsari, Panchmahal, Patan, Vadodara	Patel, 1985; Siliwal, 2000; Bhatt, 2014 Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Thumar, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Cyrtarachne promilai Tikader, 1963	Junagadh	Chatrabhuj, 2007
<i>Cyrtophora bidenta</i> Tikader, 1970	Junagadh	Chatrabhuj, 2007
Cyrtophora cicatrosa (Stoliczka, 1869)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha,	Patel, 1975b, 1985, 2003; Sebastian, 1988; Siliwal <i>et al.</i> , 2003a; Kumar & Shivakumar, 2004; Parmar, 2018a, 2021; Parmar & Acharya, 2015; Parasharya & Pathan, 2013; Bhatt, 2014; Solanki & Kumar, 2015;

mily/Species	Distribution in districts	References
	Surendranagar, Vadodara	Prajapati <i>et al.</i> , 2016c, 2018; Suthar <i>et al.</i> , 2017; Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Cyrtophora citricola (Forskål, 1775)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Vadodara	Patel, 1975b, 1985, 2003; Siliwal, 2000; Patel & Vyas, 2001; Siliwal <i>et al.</i> , 2003a; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012; Bhatt, 2014; Prajapati <i>et al.</i> , 2016c; Suthar <i>et al.</i> , 2017; Yadav <i>et al.</i> 2017; Parmar, 2018a, 2020; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020
<i>Cyrtophora feae</i> (Thorell, 1887)	Navsari	Patel, 2003; Thumar, 2019
Eriovixia excelsa (Simon, 1889)	Amreli, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara	Tikader & Bal, 1981; Tikader, 1982; Patel, 1985; Sebastian, 1988; Siliwal, 2000; Patel & Vyas, 2001; Patel, 2003; Siliwal <i>et al.</i> , 2003a, b; Patel <i>et al.</i> , 2012; Bhatt, 2014; Parmar <i>et al.</i> , 2015 Solanki & Kumar, 2015; Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav & Kumar, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Eriovixia laglaizei (Simon, 1877)	Anand, Banaskantha, Dang, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Patel, 1971; Siliwal, 2000; Patel, 2003; Siliwal <i>et al.</i> , 2003b; Solanki & Kumar, 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Thumar, 2019; Parmar, 2018a, 2020; Yadav, 2019; Solanki <i>et al.</i> , 2020
Eriovixia poonaensis (Tikader & Bal, 1981)	Navsari, Panchmahal	Patel, 2003; Solanki, 2015; Solanki <i>et al.</i> , 2020
Gasteracantha geminata (Fabricius, 1798)	Banaskantha, Kachchh, Mehsana, Sabarkantha	Parmar <i>et al.</i> , 2015; Parmar, 2018a, 2020
Gasteracantha kuhli C.L. Koch, 1837	Dang, Kachchh, Navsari, Panchmahal	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parmar <i>et al.</i> , 2015; Solanki & Kumar, 2015; Solanki, 2015; Thumar, 2019; Solanki <i>et al.</i> , 2020
Gasteracantha remifera Butler, 1873	Junagadh	Chatrabhuj, 2007
Gasteracantha unguifera Simon, 1889	Banaskantha, Bhavnagar, Dang, Junagadh, Vadodara	Patel, 1985; Siliwal, 2000; Siliwal <i>et al.</i> , 2002, 2003a; Chatrabhuj, 2007
Gea spinipes C.L. Koch, 1843	Banaskantha, Mehsana, Sabarkantha	Parmar, 2018a, 2020
Gea subarmata Thorell, 1890	Amreli, Bhavnagar, Dang, Panchmahal	Patel, 1985; Mehta, 2001; Solanki, 2015; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020
Gibbaranea bituberculata (Walckenaer, 1802)	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Guizygiella indica (Tikader & Bal, 1980)	Anand, Banaskantha, Bhavnagar, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Patel, 1985; Patel, 2003; Siliwal <i>et al.</i> , 2003a, b; Chatrabhuj, 2007; Parmar, 2013; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Solanki, 2015; Solanki & Kumar, 2015; Yadav <i>et al.</i> , 2017; Thumar, 2019; Solanki <i>et al.</i> , 2020

nily/Species	Distribution in districts	References
Guizygiella melanocrania (Thorell, 1887)	Ahmedabad, Banaskantha, Bhavnagar, Dang, Junagadh, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Patel, 1985; Siliwal <i>et al.</i> , 2003a, b; Siliwal, 2000; Chatrabhuj, 2007; Solanki & Kumar, 2015; Solanki, 2015 Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020, 2021; Thumar, 2019; Yadav, 2019; Solanki <i>et al.</i> , 2020; Chandra <i>et al.</i> , 2021
Guizygiella shivui (Patel & Reddy, 1990)	Banaskantha, Bhavnagar, Mehsana, Panchmahal, Sabarkantha	Patel, 1985; Patel & Reddy, 1990; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Yadav, 2019; Solanki <i>et al.</i> , 2020
Herennia multipuncta (Doleschall, 1859)	Dang, Junagadh, Navsari	Mehta, 2001; Patel, 2003; Chatrabhuj, 2007
Larinia chloris (Savigny, 1825)	Amreli, Banaskantha, Bhavnagar, Dang, Mehsana, Panchmahal, Sabarkantha, Vadodara	Patel, 1985; Siliwal, 2000; Mehta, 2001; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2006; Parmar, 2021; Yadav, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020
Larinia phthisica (L. Koch, 1871)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dang, Kheda, Mehsana, Navsari, Patan, Sabarkantha, Surendranagar	Patel, 1975a, 1985, 2003; Sebastian, 1988; Siliwal <i>et al.</i> , 2003b; Parmar, 2013, 2020, 2021; Parmar & Acharya, 2015; Parmar & Patel, 2015; Thumar, 2019; Parmar <i>et al.</i> , 2023
Larinia tyloridia Patel, 1975	Anand, Bhavnagar, Kachchh	Patel, 1975a, 1985; Patel & Reddy, 1990; Parmar <i>et al.</i> , 2015
<i>Lipocrea fusiformis</i> (Thorell, 1877)	Panchmahal	Solanki, 2015; Solanki <i>et al.</i> , 2020
Macracantha hasselti (C.L. Koch, 1837)	Banaskantha, Dang, Kachchh, Navsari, Panchmahal	Patel, 2003; Siliwal <i>et al.</i> , 2002, 2003a Parmar <i>et al.</i> , 2015; Suthar <i>et al.</i> , 2017 Yadav, 2019; Yadav & Kumar, 2019
Neoscona achine (Simon, 1906)	Amreli, Bhavnagar, Kachchh, Mehsana	Patel, 1985; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2015; Parmar, 2018a, b, 2021; Dal & Trivedi, 2020
Neoscona bengalensis Tikader & Bal, 1981	Anand, Dang, Kachchh, Mehsana, Navsari, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Parmar, 2013, 2018a Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2018
Neoscona bihumpi Patel, 1988	Bhavnagar, Mehsana	Patel, 1988a; Parmar, 2021
Neoscona biswasi Bhandari & Gajbe, 2001	Mehsana	Parmar & Patel, 2017; Parmar, 2018a
Neoscona inusta (L. Koch, 1871)	Anand, Panchmahal	Parmar, 2013; Yadav, 2019
Neoscona molemensis Tikader & Bal, 1981	Dang	Siliwal et al., 2003b
Neoscona mukerjei Tikader, 1980	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Junagadh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1985, 2003; Patel & Pillai, 1988 Sebastian, 1988; Siliwal, 2000; Patel & Vyas, 2001; Siliwal et al., 2003b; Kumar & Shivakumar, 2004; Chatrabhuj, 2007; Patel et al., 2012; Parmar, 2020, 2021; Parasharya & Pathan, 2013; Solanki & Kumar, 2014 2015; Parmar & Acharya, 2015; Parmar et al., 2015; Prajapati et al., 2016c, 2018; Suthar et al., 2017; Yada et al., 2017; Thumar, 2019; Solanki et al., 2020; Parmar et al., 2023

Family/Species	Distribution in districts	References
Neoscona murthyi Patel & Reddy, 1990	Bhavnagar	Patel & Reddy, 1990
Neoscona nautica (L. Koch, 1875)	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Kheda, Mehsana, Panchmahal, Patan, Rajkot, Sabarkantha	Tikader & Bal, 1981; Tikader, 1982; Patel, 1985; Sebastian, 1988; Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Patel <i>et al.</i> , 2012; Parmar, 2021; Bhatt, 2014; Parmar <i>et al.</i> , 2015; Solanki & Kumar, 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Neoscona odites (Simon, 1906)	Anand, Banaskantha, Kachchh, Mehsana, Sabarkantha	Parmar, 2013, 2018a, 2020, 2021; Parmar <i>et al.</i> , 2015
<i>Neoscona pavida</i> (Simon, 1906)	Navsari	Patel, 2003
Neoscona punctigera (Doleschall, 1857)	Bhavnagar, Dahod, Dang, Junagadh, Mehsana, Navsari	Patel, 1975b, 1985, 2003; Tikader & Bal, 1981; Tikader, 1982; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012; Prajapati <i>et al.</i> , 2023
Neoscona sinhagadensis (Tikader, 1975)	Dang, Navsari, Rajkot, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004, 2006; Trivedi, 2009; Thumar, 2019
Neoscona subfusca (C.L. Koch, 1837)	Banaskantha, Mehsana, Sabarkantha	Parmar, 2018a, 2020
Neoscona theisi (Walckenaer, 1841)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1975b, 1985; Tikader & Bal, 1981; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Patel & Vyas, 2001; Siliwal et al., 2003b; Kumar & Shivakumar, 2006; Chatrabhuj, 2007; Pradipkumar, 2009; Patel et al., 2012; Parmar, 2013, 2018b, 2021; Parasharya & Pathan, 2013; Parmar et al., 2015; Solanki & Kumar, 2015; Prajapati et al., 2016c, 2018; Suthar et al., 2017; Yadav et al., 2017; Ramanujam et al., 2019; Thumar, 2019; Dal & Trivedi, 2020; Solanki et al., 2020; Parmar et al., 2023
Neoscona vigilans (Blackwall, 1865)	Amreli, Anand, Banaskantha, Bhavnagar, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha	Patel, 1985, 2003; Parmar & Acharya, 2015; Solanki & Kumar, 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Prajapati <i>et al.</i> , 2018; Parmar, 2020; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020
Nephila pilipes (Fabricius, 1793)	Banaskantha, Dang, Junagadh, Mehsana, Panchmahal, Navsari, Sabarkantha	Patel, 1975b; Patel, 2003; Siliwal <i>et al.</i> , 2003b; Chatrabhuj, 2007; Parmar & Patel, 2017; Suthar <i>et al.</i> , 2017; Parmar, 2018a, 2020; Thumar, 2019
Ordgarius hobsoni (O. Pickard-Cambridge, 1877)	Navsari , Vadodara	Siliwal, 2000; Kumar & Shivakumar, 2006; Thumar <i>et al.</i> , 2016; Thumar, 2019
Ordgarius sexspinosus (Thorell, 1894)	Navsari	Thumar et al., 2016; Thumar, 2019
Parawixia dehaani (Doleschall, 1859)	Banaskantha, Dang, Mehsana, Sabarkantha, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Parmar & Patel, 2015; Parmar, 2020

Family/Species	Distribution in districts	References
Poltys bhabanii (Tikader, 1970)	Banaskantha, Mehsana, Panchmahal, Sabarkantha	Solanki, 2015; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Yadav, 2019; Solanki <i>et al.</i> , 2020
Poltys bhavnagarensis Patel, 1988	Bhavnagar	Patel, 1988b
Poltys columnaris Thorell, 1890	Panchmahal	Solanki, 2015; Solanki et al., 2020
Poltys nagpurensis Tikader, 1982	Panchmahal	Solanki, 2015; Solanki <i>et al.</i> , 2020
Thelacantha brevispina (Doleschall, 1857)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dang, Junagadh, Kachchh, Mehsana, Navsari, Panchmahal, Sabarkantha	Patel, 1971, 1985; Parmar <i>et al.</i> , 2015; Solanki & Kumar, 2015; Solanki, 2015 Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Thumar, 2019; Solanki <i>et al.</i> , 2020
3. Barychelidae		
Sason robustum (O. Pickard-Cambridge, 1883)	Junagadh	Parikh <i>et al.</i> , 2008
4. Cheiracanthiidae		
Cheiracanthium danieli Tikader, 1975	Dang, Junagadh, Navsari, Panchmahal, Sabarkantha	Sebastian, 1988; Mehta, 2001; Chatrabhuj, 2007; Yadav <i>et al.</i> , 2017; Thumar, 2019
Cheiracanthium himalayense Gravely, 1931	Bhavnagar, Junagadh	Majumder & Tikader, 1991; Chatrabhuj, 2007
Cheiracanthium indicum O. Pickard-Cambridge, 1874	Ahmedabad, Navsari	Majumder & Tikader, 1991; Thumar, 2019
Cheiracanthium inornatum O. Pickard-Cambridge, 1874	Panchmahal	Solanki & Kumar, 2015; Solanki, 2015 Solanki <i>et al.</i> , 2020
Cheiracanthium kashmirense Majumder & Tikader, 1991	Junagadh	Chatrabhuj, 2007
Cheiracanthium melanostomum (Thorell, 1895)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Kheda, Junagadh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Majumder & Tikader, 1991; Siliwal, 2000; Patel & Vyas, 2001; Kumar & Shivakumar, 2006; Chatrabhuj, 2007; Pradipkumar, 2009; Parasharya & Pathan, 2013; Patel <i>et al.</i> 2013; Solanki & Kumar, 2014; Yadav <i>et al.</i> , 2017; Solanki <i>et al.</i> , 2020
Cheiracanthium mysorense Majumder & Tikader, 1991	Bhavnagar	Majumder & Tikader, 1991
Cheiracanthium nalsaroverense Patel & Patel, 1973	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Kachchh, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel & Patel, 1973b, 1985; Patel & Pillai, 1988; Sebastian, 1988; Majumder & Tikader, 1991; Parmar, 2013; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015
Cheiracanthium poonaense Majumder & Tikader, 1991	Rajkot, Vadodara	Siliwal et al., 2003b; Trivedi, 2009
Cheiracanthium saraswatii Tikader, 1962	Anand, Bhavnagar, Dahod, Dang, Junagadh, Navsari, Rajkot	Patel, 1971, 1985; Patel & Vyas, 2001; Patel, 2003; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012
Cheiracanthium triviale (Thorell, 1895)	Panchmahal	Solanki, 2015; Yadav <i>et al.</i> , 2017; Yadav, 2019; Solanki <i>et al.</i> , 2020

Family/Species	Distribution in districts	References
5. Clubionidae		
Clubiona drassodes O. Pickard-Cambridge, 1874	Banaskantha, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004, 2006; Solanki, 2015; Solanki & Kumar, 2015; Parmar & Patel, 2017; Yadav <i>et al.</i> , 2017; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Yadav & Kumar, 2019; Parmar, 2020, 2021; Solanki <i>et al.</i> , 2020
Clubiona filicata O. Pickard-Cambridge, 1874	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel & Patel, 1973b; Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Patel, 2003; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004; Solanki & Kumar, 2014; Parmar <i>et al.</i> , 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Solanki <i>et al.</i> , 2020
Clubiona ludhianaensis Tikader, 1976	Dang, Junagadh, Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988; Majumder & Tikader, 1991; Siliwal, 2000; Mehta, 2001; Chatrabhuj, 2007
<i>Clubiona tikaderi</i> Majumder & Tikader, 1991	Gujarat	Yadav et al., 2017
6. Corinnidae		
Cambalida deorsa Murthappa, Prajapati, Sankaran & Sebastian, 2016	Gandhinagar, Patan	Murthappa et al., 2016; Parmar et al., 2023
Cambalida dhupgadensis Bodkhe, Uniyal & Kamble, 2016	Panchmahal	Yadav, 2019
Cambalida flavipes (Gravely, 1931)	Dang, Panchmahal, Vadodara	Siliwal, 2000; Mehta, 2001; Siliwal <i>et al.</i> , 2003b; Yadav, 2019
Cambalida tuma Murthappa, Prajapati, Sankaran & Sebastian, 2016	Narmada	Murthappa et al., 2016
Castianeira tinae Patel & Patel, 1973	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Junagadh, Kachchh, Kheda, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel & Patel, 1973b, 1985; Patel & Pillai, 1988; Sebastian, 1988; Majumder & Tikader, 1991; Mehta, 2001; Parikh <i>et al.</i> , 2008; Parmar, 2013, 2020, 2021; Bhatt, 2014; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2015
Castianeira zetes Simon, 1897	Kheda, Mehsana, Panchmahal, Patan, Sabarkantha,	Sebastian, 1988; Bhatt, 2014; Solanki & Kumar, 2015; Solanki, 2015; Parmar, 2018a; Yadav, 2019; Solanki <i>et</i>
7 Ctonidae	Surendranagar	al., 2020; Parmar et al., 2023
7. Ctenidae Anahita dangsa (Reddy & Patel, 1994)	Dang	Reddy & Patel, 1994
Bowie narashinhai (Patel & Reddy, 1988)	Panchmahal	Solanki, 2015; Solanki et al., 2020
8. Deinopidae		
Asianopis goalparaensis (Tikader & Malhotra, 1978)	Junagadh, Vadodara	Siliwal, 2000; Siliwal & Kumar, 2003a; Parikh <i>et al.</i> , 2008
9. Dictynidae		
Nigma albida (O. Pickard-Cambridge, 1885)	Junagadh	Parikh <i>et al.</i> , 2008

Family/Species	Distribution in districts	References
<i>Nigma shiprai</i> (Tikader, 1966)	Amreli, Bhavnagar, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988
10. Eresidae		
Stegodyphus mirandus Pocock, 1899	Bhavnagar, Dang, Junagadh, Panchmahal	Patel, 1985; Siliwal <i>et al.</i> , 2003b; Chatrabhuj, 2007; Yadav, 2019
Stegodyphus pacificus Pocock, 1900	Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Patel, 1971, 1985; Mehta, 2001; Patel & Vyas, 2001; Patel, 2002, 2003; Parikh <i>et al.</i> , 2008; Patel <i>et al.</i> , 2012; Solanki, 2015; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020
Stegodyphus sarasinorum Karsch, 1892	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Patel, 1971, 1985; Siliwal, 2000; Patel, 2002, 2003; Chatrabhuj, 2007; Bhatt, 2014; Solanki & Kumar, 2014, 2015; Parmar <i>et al.</i> , 2015; Solanki, 2015; Suthar <i>et al.</i> , 2017; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020
Stegodyphus tibialis (O. Pickard-Cambridge, 1869)	Anand, Bhavnagar, Dahod, Dang, Navsari, Rajkot	Patel, 1971, 1985; Patel & Vyas, 2001; Patel, 2002, 2003; Siliwal <i>et al.</i> , 2003b; Patel <i>et al.</i> , 2012
11. Filistatidae		
Pholcoides seclusa (O. Pickard-Cambridge, 1885)	Junagadh	Parikh et al., 2008
Pritha dharmakumarsinhjii Patel, 1978	Amreli, Bhavnagar, Dahod, Junagadh, Navsari, Panchmahal	Patel, 1978b, 1985, 2002, 2003; Parikh <i>et al.</i> , 2008; Yadav <i>et al.</i> , 2017; Dal & Trivedi, 2020
Pritha napadensis (Patel, 1975)	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Mehsana, Navsari, Rajkot, Sabarkantha	Patel, 1975c, 1978b, 1985, 2002, 2003; Mehta, 2001; Patel & Vyas, 2001; Parmar, 2013, 2020; Parmar <i>et al.</i> , 2015
<i>Pritha poonaensis</i> (Tikader, 1963)	Anand, Kheda, Panchmahal	Patel, 1971, 1975c, 1978b; Yadav, 2019
Sahastata ashapuriae Patel, 1978	Banaskantha, Bhavnagar, Mehsana, Panchmahal, Sabarkantha	Patel, 1978b, 1985; Parmar, 2018a, 2020; Yadav, 2019
Sahastata sinuspersica Marusik, Zamani & Mirshamsi, 2014	Gujarat	Yadav <i>et al.</i> , 2017
12. Gnaphosidae		
Callilepis lambai Tikader & Gajbe, 1977	Bhavnagar	Patel, 1985
Callilepis rajasthanica Tikader & Gajbe, 1977	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
<i>Callilepis rukminiae</i> Tikader & Gajbe, 1977	Bhavnagar, Sabarkantha	Patel, 1985; Sebastian, 1988
Cryptodrassus mahabalei (Tikader, 1982)	Mehsana, Panchmahal, Sabarkantha, Surendranagar	Sebastian, 1988; Yadav, 2019
Cryptodrassus ratnagiriensis (Tikader & Gajbe, 1976)	Sabarkantha	Sebastian, 1988

mily/Species	Distribution in districts	References
<i>Drassodes cerinus</i> Simon, 1897	North Gujarat	Simon, 1897
Drassodes gujaratensis Patel & Patel, 1975	Anand, Vadodara	Patel & Patel, 1975a; Siliwal <i>et al.</i> , 2003b
Drassodes haribhaiius (Patel & Patel, 1975)	Anand	Patel & Patel, 1975a
<i>Drassodes luridus</i> (O. Pickard-Cambridge, 1874)	Dang, Navsari	Mehta, 2001; Thumar, 2019
Drassodes macilentus (O. Pickard-Cambridge, 1874)	Mehsana, Sabarkantha	Sebastian, 1988
Drassodes parvidens Caporiacco, 1934	Bhavnagar, Dahod, Dang, Rajkot	Patel, 1985; Mehta, 2001; Patel & Vyas, 2001; Patel <i>et al.</i> , 2012
Drassodes pashanensis Tikader & Gajbe, 1977	Bhavnagar, Dang, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Mehta, 2001
Drassodes sirmourensis (Tikader & Gajbe, 1977)	Gujarat	Yadav et al., 2017
Eilica kandarpae Nigam & Patel, 1996	Junagadh	Chatrabhuj, 2007
Eilica platnicki Tikader & Gajbe, 1977	Dang	Mehta, 2001
Eilica songadhensis Patel, 1988	Bhavnagar	Patel, 1988c
Eilica tikaderi Platnick, 1976	Ahmedabad, Bhavnagar	Patel, 1985; Prajapati et al., 2016c
Gnaphosa jodhpurensis Tikader & Gajbe, 1977	Amreli, Banaskantha, Bhavnagar, Dang, Junagadh, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988; Mehta, 2001; Trivedi, 2016
Gnaphosa pauriensis Tikader & Gajbe, 1977	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Gnaphosa poonaensis Tikader, 1973	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Jamnagar, Mehsana, Panchmahal, Rajkot, Sabarkantha, Surendranagar Vadodara	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Siliwa et al., 2003am b; Kumar & Shivakumar, 2006; Parasharya & Pathan, 2013; Yadav, 2019
Gnaphosa stoliczkai O. Pickard-Cambridge, 1885	Banaskantha, Dang, Kachchh, Mehsana, Sabarkantha	Siliwal <i>et al.</i> , 2003b; Parmar <i>et al.</i> , 2015; Parmar, 2020, 2021
Haplodrassus sataraensis Tikader & Gajbe, 1977	Bhavnagar, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988
Hitobia poonaensis (Tikader & Gajbe, 1976)	Dang, Junagadh	Mehta, 2001; Chatrabhuj, 2007
Marinarozelotes jaxartensis (Kroneberg, 1875)	Amreli, Anand, Bhavnagar, Dang, Jamnagar, Mehsana, Panchmahal, Rajkot, Sabarkantha, Sabarkantha, Surendranagar, Vadodara	Patel & Patel, 1975a; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Mehta, 2001; Siliwal <i>et al.</i> , 2003b; Solanki, 2015; Yadav <i>et al.</i> , 2017; Solanki <i>et al.</i> , 2020
Megamyrmaekion caudatum Reuss, 1834	Bhavnagar, Junagadh, Mehsana, Navsari,	Patel, 1985; Sebastian, 1988; Chatrabhuj, 2007; Solanki, 2015;

mily/Species	Distribution in districts	References
	Panchmahal, Sabarkantha	Thumar, 2019; Solanki <i>et al.</i> , 2020
Megamyrmaekion pritiae (Tikader, 1982)	Bhavnagar, Navsari	Patel, 1985; Thumar, 2019
Poecilochroa barmani Tikader, 1982	Mehsana, Navsari, Sabarkantha, Surendranagar	Sebastian, 1988; Thumar, 2019
Poecilochroa khodiar (Patel, 1988)	Bhavnagar, Junagadh	Patel, 1988d; Chatrabhuj, 2007
Poecilochroa kuljitae (Tikader, 1982)	Panchmahal	Solanki, 2015; Yadav, 2019; Solanki <i>e al.</i> , 2020
Poecilochroa poonaensis (Tikader, 1982)	Bhavnagar, Junagadh, Mehsana, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Sebastian, 1988; Siliwal, 2000; Patel & Vyas, 2001; Chatrabhuj, 2007
<i>Poecilochroa tikaderi</i> Patel, 1989	Bhavnagar, Junagadh, Kachchh	Patel, 1989; Chatrabhuj, 2007; Parmar <i>et al.</i> , 2015
Pterotricha strandi Spassky, 1936	Jamnagar	Gajbe, 1983
Scotophaeus blackwalli (Thorell, 1871)	Navsari	Thumar, 2019
Scotophaeus goaensis (Tikader, 1982)	Bhavnagar	Patel, 1985
Scotophaeus madalasae Tikader & Gajbe, 1977	Vadodara	Siliwal, 2000; Kumar & Shivakumar, 2006
Scotophaeus poonaensis Tikader, 1982	Amreli, Banaskantha, Bhavnagar, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988
Scotophaeus rajasthanus Tikader, 1966	Amreli, Banaskantha, Bhavnagar, Mehsana, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988
Setaphis browni (Tucker, 1923)	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Setaphis subtilis (Simon, 1897)	Amreli, Banaskantha, Jamnagar, Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988; Dal & Trivedi, 2020
<i>Zelotes choubeyi</i> Tikader & Gajbe, 1979	Sabarkantha	Sebastian, 1988
Zelotes jabalpurensis Tikader & Gajbe, 1976	Mehsana, Sabarkantha	Sebastian, 1988
<i>Zelotes kusumae</i> Tikader, 1982	Bhavnagar	Patel, 1985
Zelotes maindroni (Simon, 1905)	Amreli, Bhavnagar, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988
Zelotes mandae Tikader & Gajbe, 1979	Bhavnagar, Dang, Navsari, Panchmahal	Patel, 1985; Mehta, 2001; Solanki, 2015; Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020

Family/Species	Distribution in districts	References
Zelotes mandlaensis Tikader & Gajbe, 1976	Navsari	Yadav et al., 2017; Thumar, 2019
Zelotes nainitalensis Tikader & Gajbe, 1976	Panchmahal	Yadav, 2019
Zelotes nasikensis Tikader & Gajbe, 1976	Bhavnagar	Patel, 1985
Zelotes poonaensis Tikader & Gajbe, 1976	Junagadh, Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988; Chatrabhuj, 2007
<i>Zelotes sajali</i> Tikader & Gajbe, 1979	Mehsana, Panchmahal, Vadodara	Siliwal, 2000; Kumar & Shivakumar, 2004; Yadav, 2019
Zelotes shantae Tikader, 1982	Amreli, Bhavnagar, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988
Zelotes sindi Caporiacco, 1934	Bhavnagar	Patel, 1985
13. Hahniidae		
<i>Hahnia mridulae</i> Tikader, 1970	Junagadh	Parikh <i>et al.</i> , 2008
Scotospilus maindroni (Simon, 1906)	Anand	Parasharya & Pathan, 2013
14. Hersiliidae		
Hersilia savignyi Lucas, 1836	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Porbandar, Rajkot, Sabarkantha	Patel, 1971, 1985, 2003; Patel & Vyas, 2001; Patel et al., 2012; Parmar, 2018a, 2020; Bhatt, 2014; Parmar et al., 2015; Prajapati et al., 2016c, 2018; Solanki, 2015; Thumar, 2019; Yadav & Kumar, 2019; Solanki et al., 2020; Chandra et al., 2021; Parmar et al., 2023
<i>Hersilia striata</i> Wang & Yin, 1985	Mehsana	Parmar, 2018a, 2021
<i>Hersilia sumatrana</i> (Thorell, 1890)	Junagadh, Navsari	Parikh et al., 2008; Thumar, 2019
Hersilia tibialis M. Baehr & B. Baehr, 1993	Junagadh	Parikh <i>et al.</i> , 2008
Murricia hyderabadensis Javed & Tampal, 2010	Panchmahal	Solanki, 2015; Solanki <i>et al.</i> , 2020
15. Idiopidae		
<i>Idiops bonny</i> Siliwal, Hippargi, Yadav & Kumar, 2020	Dang	Siliwal et al., 2020
<i>Idiops reshma</i> Siliwal, Hippargi, Yadav & Kumar, 2020	Dang	Siliwal et al., 2020
<i>Idiops sally</i> Siliwal, Hippargi, Yadav & Kumar, 2020	Dang	Siliwal <i>et al.</i> , 2020
16. Ischnothelidae		
<i>Indothele dumicola</i> (Pocock, 1900)	Junagadh	Parikh <i>et al.</i> , 2008
17. Linyphiidae		
<i>Linyphia sikkimensis</i> Tikader, 1970	Dang	Siliwal et al., 2003b; Suthar et al., 2017

Family/Species	Distribution in districts	References
Neriene sundaica (Simon, 1905)	Panchmahal	Yadav, 2019
18. Liocranidae		
<i>Oedignatha indica</i> (Tikader, 1981)	Amreli, Banaskantha, Mehsana, Bhavnagar, Dang, Kachchh, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988; Mehta, 2001; Parmar <i>et al.</i> , 2015
Oedignatha poonaensis Majumder & Tikader, 1991	Junagadh	Chatrabhuj, 2007
Oedignatha scrobiculata Thorell, 1881	Panchmahal, Vadodara	Siliwal, 2000; Yadav, 2019
Sphingius barkudensis Gravely, 1931	Dang, Vadodara	Siliwal, 2000; Siliwal et al., 2003b
Sphingius caniceps Simon, 1906	Junagadh, Sabarkantha, Surendranagar, Vadodara	Sebastian, 1988; Siliwal et al., 2003b; Chatrabhuj, 2007
Sphingius nainitalensis (Gajbe, 1979)	Panchmahal, Sabarkantha	Sebastian, 1988; Yadav, 2019
19. Lycosidae		
Arctosa himalayensis Tikader & Malhotra, 1980	Bhavnagar, Patan	Patel, 1985; Parmar et al., 2023
Arctosa indica Tikader & Malhotra, 1980	Banaskantha, Bhavnagar, Dang, Kachchh, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Mehta, 2001; Parmar <i>et al.</i> , 2015; Parmar, 2018a, 2020
<i>Arctosa khudiensis</i> (Sinha, 1951)	Bhavnagar	Patel, 1985
Draposa amkhasensis (Tikader & Malhotra, 1976)	Bhavnagar	Patel, 1985
Draposa atropalpis (Gravely, 1924)	Bhavnagar	Patel, 1985
Draposa burasantiensis (Tikader & Malhotra, 1976)	Bhavnagar	Patel, 1985
<i>Draposa oakleyi</i> (Gravely, 1924)	Bhavnagar, Dang, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Mehta, 2001
Evippa banarensis Tikader & Malhotra, 1980	Bhavnagar, Rajkot	Patel, 1985; Patel & Vyas, 2001
Evippa praelongipes (O. Pickard-Cambridge, 1871)	Amreli, Bhavnagar, Kachchh, Mehsana, Rajkot, Sabarkantha, Surendranagar	Tikader & Malhotra, 1980; Patel & Pillai, 1988; Sebastian, 1988; Trivedi, 2009
Evippa rajasthanea Tikader & Malhotra, 1980	Amreli, Banaskantha, Bhavnagar, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Trivedi, 2009
Evippa rubiginosa Simon, 1885	Bhavnagar, Rajkot	Patel, 1985; Patel & Vyas, 2001
Evippa shivajii Tikader & Malhotra, 1980	Bhavnagar	Patel, 1985
Evippa sohani Tikader & Malhotra, 1980	Bhavnagar, Dang, Mehsana, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988; Mehta, 2001

nily/Species	Distribution in districts	References
Evippa solanensis Tikader & Malhotra, 1980	Bhavnagar	Patel, 1985
Hippasa agelenoides (Simon, 1884)	Banaskantha, Bhavnagar, Mehsana, Navsari, Sabarkantha	Patel, 1985; Parmar, 2018a, 2020, 2021; Thumar, 2019
Hippasa deserticola Simon, 1889	Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1971, 1985; Patel & Pillai, 1988 Sebastian, 1988; Patel & Vyas, 2001; Patel, 2003; Siliwal <i>et al.</i> , 2003a, b; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012; Parasharya & Pathan, 2013; Bhatt, 2014; Patel & Patel, 2015; Suthar <i>et al.</i> , 2017; Yadav & Kumar, 2019, Parmar <i>et al.</i> , 2023
Hippasa himalayensis Gravely, 1924	Bhavnagar	Patel, 1985
<i>Hippasa holmerae</i> Thorell, 1895	Dang, Navsari	Mehta, 2001; Thumar, 2019
<i>Hippasa loundesi</i> Gravely, 1924	Ahmedabad,	Prajapati et al., 2016c
Hippasa lycosina Pocock, 1900	Dang, Junagadh, Navsari, Panchmahal, Vadodara, Valsad	Siliwal, 2000; Patel, 2003; Siliwal <i>et al.</i> , 2003a, b; Parikh <i>et al.</i> , 2008; Solanki, 2015; Solanki <i>et al.</i> , 2020
Hippasa madraspatana Gravely, 1924	Bhavnagar, Mehsana, Navsari, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Patel, 2003
Hippasa pantherina Pocock, 1899	Kheda, Navsari	Patel, 2003b; Bhatt, 2014
Hippasa partita (O. Pickard-Cambridge, 1876)	Bhavnagar, Dang, Mehsana, Navsari, Panchmahal, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Sebastian, 1988; Mehta, 2001; Patel, 2003; Kumar & Shivakumar, 2006; Yadav <i>et al.</i> , 2017 Yadav, 2019
Hippasa valiveruensis Patel & Reddy, 1993	Junagadh	Parikh <i>et al.</i> , 2008
Lycosa bistriata Gravely, 1924	Ahmedabad, Bhavnagar, Navsari	Patel, 1985, 2003; Chandra et al., 202
<i>Lycosa carmichaeli</i> Gravely, 1924	Bhavnagar	Patel, 1985
Lycosa chaperi Simon, 1885	Rajkot	Patel & Vyas, 2001
<i>Lycosa choudhuryi</i> Tikader & Malhotra, 1980	Bhavnagar, Junagadh	Patel, 1985; Parikh et al., 2008
Lycosa fuscana Pocock, 1901	Kachchh	Parmar et al., 2015
<i>Lycosa geotubalis</i> Tikader & Malhotra, 1980	Gujarat, Navsari, Rajkot	Tikader & Malhotra, 1980; Patel & Vyas, 2001; Patel, 2003; Parmar <i>et al.</i> 2015
Lycosa goliathus Pocock, 1901	Rajkot	Patel & Vyas, 2001
Lycosa iranii Pocock, 1901	Anand, Junagadh, Kachchh, Rajkot	Patel & Vyas, 2001; Chatrabhuj, 2007 Parmar, 2013; Parmar <i>et al.</i> , 2015
Lycosa kempi Gravely, 1924	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
<i>Lycosa lambai</i> Tikader & Malhotra, 1980	Junagadh, Panchmahal	Chatrabhuj, 2007; Yadav <i>et al.</i> , 2017; Yadav, 2019

nily/Species	Distribution in districts	References
Lycosa mackenziei Gravely, 1924	Bhavnagar, Kheda, Mehsana, Navsari, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Bhatt, 2014; Thumar, 2019
Lycosa madani Pocock, 1901	Anand, Bhavnagar, Dang, Mehsana, Panchmahal, Rajkot, Sabarkantha	Patel, 1985; Sebastian, 1988; Siliwal e al., 2003b; Trivedi, 2009; Parasharya e Pathan, 2013; Yadav et al., 2017; Yadav, 2019
Lycosa mahabaleshwarensis Tikader & Malhotra, 1980	Dang, Vadodara	Siliwal <i>et al.</i> , 2003a, b; Suthar <i>et al.</i> , 2017
Lycosa moulmeinensis Gravely, 1924	Bhavnagar	Patel, 1985
Lycosa nigrotibialis Simon, 1884	Gujarat	Tikader & Malhotra, 1980
Lycosa phipsoni Pocock, 1899	Panchmahal, Vadodara	Siliwal, 2000; Yadav <i>et al.</i> , 2017; Yadav, 2019
Lycosa pictula Pocock, 1901	Dahod, Dang, Mehsana, Rajkot, Sabarkantha, Vadodara	Sebastian, 1988; Siliwal, 2000; Patel & Vyas, 2001; Siliwal <i>et al.</i> , 2003a, b; Kumar & Shivakumar, 2006; Patel <i>et al.</i> , 2012
Lycosa poonaensis Tikader & Malhotra, 1980	Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kheda, Mehsana, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel & Pillai, 1988; Patel & Vyas, 2001; Chatrabhuj, 2007; Patel et al., 2012; Parasharya & Pathan, 2013; Bhatt, 2014; Solanki, 2015; Yadav et al., 2017; Parmar, 2021; Solanki et al. 2020
Lycosa prolifica Pocock, 1901	Navsari, Rajkot	Patel & Vyas, 2001; Patel, 2003; Pate et al., 2013
Lycosa shillongensis Tikader & Malhotra, 1980	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Lycosa tista Tikader, 1970	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Kachchh, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel & Pillai, 1988; Sebastian, 1988; Siliwal <i>et al.</i> , 2003a, b; Trivedi, 2009; Parmar, 2013, 2018a, 2020; Parmar <i>e al.</i> , 2015; Yadav <i>et al.</i> , 2017; Thumar 2019
Lycosa wroughtoni Pocock, 1899	Valsad	Pocock, 1899, 1900; Tikader & Malhotra, 1980
Lycosa yerburyi Pocock, 1901	Bhavnagar	Patel, 1985
Margonia himalayensis (Gravely, 1924)	Anand	Patel, 1971
Pardosa alii Tikader, 1977	Bhavnagar, Kachchh, Mehsana	Patel, 1985; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2015
Pardosa altitudis Tikader & Malhotra, 1980	Bhavnagar	Patel, 1985
Pardosa fletcheri (Gravely, 1924)	Bhavnagar	Patel & Pillai, 1988
Pardosa gopalai Patel & Reddy, 1993	Junagadh	Parikh <i>et al.</i> , 2008
Pardosa heterophthalma (Simon, 1898)	Panchmahal, Vadodara	Siliwal, 2000; Yadav, 2019
Pardosa minuta Tikader & Malhotra 1976	Vadodara	Kumar & Shivakumar, 2006

mily/Species	Distribution in districts	References
Pardosa mukundi Tikader & Malhotra, 1980	Ahmedabad, Amreli, Bhavnagar, Junagadh, Panchmahal, Vadodara	Patel & Pillai, 1988; Siliwal, 2000; Kumar & Shivakumar, 2004; Chatrabhuj, 2007; Prajapati <i>et al.</i> , 2016c; Yadav, 2019
Pardosa pseudoannulata (Bösenberg & Strand, 1906)	Anand, Banaskantha, Bhavnagar, Dang, Junagadh, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1971, 1985; Sebastian, 1988; Patel & Vyas, 2001; Kumar & Shivakumar, 2004; Chatrabhuj, 2007; Trivedi, 2009; Parasharya & Pathan, 2013; Patel <i>et al.</i> , 2013; Parmar & Patel, 2017; Thumar, 2019
Pardosa pusiola (Thorell, 1891)	Bhavnagar, Dang, Vadodara	Patel, 1985; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004
Pardosa rhenockensis (Tikader, 1970)	Anand, Bhavnagar, Mehsana, Sabarkantha, Surendranagar	Patel, 1971, 1985; Sebastian, 1988
<i>Pardosa shyamae</i> (Tikader, 1970)	Bhavnagar, Kheda, Mehsana, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Sebastian, 1988; Siliwal <i>et al.</i> , 2003b; Bhatt, 2014
Pardosa songosa Tikader & Malhotra, 1976	Bhavnagar, Dang, Junagadh, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Mehta, 2001; Trivedi, 2016
Pardosa sumatrana (Thorell, 1890)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kheda, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Patel & Vyas, 2001; Siliwal et al., 2003a, b; Patel, 2003; Kumar & Shivakumar, 2004; Patel et al., 2012; Parasharya & Pathan, 2013; Bhatt, 2014; Solanki & Kumar, 2014; Prajapati et al., 2016c; Solanki, 2015; Yadav et al., 2017; Yadav & Kumar, 2019
Pardosa sutherlandi (Gravely, 1924)	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Pardosa timidula (Roewer, 1951)	Bhavnagar	Patel, 1985
Pardosa tridentis Caporiacco, 1935	Junagadh, Vadodara	Siliwal et al., 2003b; Trivedi, 2016
Serratacosa himalayensis (Gravely, 1924)	Bhavnagar, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988
<i>Trochosa punctipes</i> (Gravely, 1924)	Ahmedabad	Chandra et al., 2021
Wadicosa fidelis (O. Pickard-Cambridge, 1872)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Jamnagar, Junagadh, Kachchh, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1971, 1985; Patel & Pillai, 1988 Siliwal, 2000; Patel & Vyas, 2001; Patel, 2003; Siliwal et al., 2003b; Kumar & Shivakumar, 2006; Chatrabhuj, 2007; Trivedi, 2009; Patel et al., 2012; Parasharya & Pathan, 2013; Solanki & Kumar, 2015; Parma et al., 2015; Solanki, 2015; Suthar et al., 2017; Yadav et al., 2017; Yadav & Kumar, 2019; Solanki et al., 2020; Parmar et al., 2023
Wadicosa quadrifera (Gravely, 1924)	Ahmedabad, Bhavnagar, Dang, Mehsana, Sabarkantha,	Patel, 1985; Sebastian, 1988; Mehta, 2001; Chandra <i>et al.</i> , 2021

Family/Species	Distribution in districts	References
	Surendranagar	
20. Oecobiidae		
<i>Oecobius putus</i> O. Pickard-Cambridge, 1876	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Vadodara	Patel, 1971, 1985; Siliwal, 2000; Patel & Vyas, 2001; Siliwal <i>et al.</i> , 2003a, b; Patel, 2002, 2003; Bhatt, 2014; Solanki, 2015; Suthar <i>et al.</i> , 2017; Yadav <i>et al.</i> , 2017; Yadav, 2019; Solanki <i>et al.</i> , 2020
Uroctea indica Pocock, 1900	Junagadh, Navsari	Parikh et al., 2008; Thumar, 2019
Uroctea manii Patel, 1987	Bhavnagar	Patel, 1987b
Uroctea thaleri Rheims, Santos & van Harten, 2007	Banaskantha, Mehsana, Sabarkantha	Parmar, 2018a, 2020
21. Oonopidae		
Brignolia carlmulleri Ranasinghe & Benjamin, 2016	Panchmahal	Yadav, 2019
Brignolia meemure Ranasinghe & Benjamin, 2016	Panchmahal	Yadav, 2019
<i>Ischnothyreus deccanensis</i> Tikader & Malhotra, 1974	Junagadh	Chatrabhuj, 2007
Triaeris barela Gajbe, 2004	Junagadh	Parikh et al., 2008
<i>Triaeris manii</i> Tikader & Malhotra, 1974	Bhavnagar, Vadodara	Patel, 1985; Siliwal, 2000; Siliwal & Kumar, 2002
Triaeris poonaensis Tikader & Malhotra, 1974	Amreli, Bhavnagar, Kheda, Junagadh, Mehsana, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Siliwal & Kumar, 2002; Chatrabhuj, 2007; Bhatt, 2014
22. Oxyopidae		
<i>Hamadruas sikkimensis</i> (Tikader, 1970)	Panchmahal	Solanki, 2015; Solanki et al., 2020
Oxyopes ashae Gajbe, 1999	Panchmahal	Solanki, 2015; Yadav, 2019; Solanki <i>et al.</i> , 2020
Oxyopes bharatae Gajbe, 1999	Amreli, Anand, Kachchh, Mehsana, Panchmahal	Parmar, 2013, 2018a, 2021; Parmar <i>et al.</i> , 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020
Oxyopes birmanicus Thorell, 1887	Amreli, Navsari, Panchmahal	Patel, 2003; Solanki & Kumar, 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Yadav, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020
Oxyopes chittrae Tikader, 1965	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Mehsana, Sabarkantha, Surendranagar	Patel, 1978a, 1985; Sebastian, 1988; Siliwal <i>et al.</i> , 2003b; Dal & Trivedi, 2020
<i>Oxyopes gujaratensis</i> Gajbe, 1999	Junagadh, Panchmahal, Vadodara	Gajbe, 1999; Solanki & Kumar, 2014; Yadav & Kumar, 2019
<i>Oxyopes gurjanti</i> Sadana & Gupta, 1995	Vadodara	Kumar & Shivakumar, 2004
Oxyopes hindostanicus Pocock, 1901	Ahmedabad, Anand, Bhavnagar, Dang, Mehsana, Panchmahal,	Patel, 1985; Dhulia & Yadav, 1991; Siliwal <i>et al.</i> , 2003b; Parmar & Patel, 2015; Solanki & Kumar, 2015; Yadav

nily/Species	Distribution in districts	References
	Patan, Vadodara	et al., 2017; Solanki et al., 2020; Chandra et al., 2021; Parmar et al., 2023
Oxyopes indicus (Walckenaer, 1805)	Junagadh	Parikh <i>et al.</i> , 2008
Oxyopes javanus Thorell, 1887	Ahmedabad, Amreli, Anand, Banaskantha, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Prajapati <i>et al.</i> 2018; Ramanujam <i>et al.</i> , 2019; Thumar, 2019; Yadav, 2019; Dal & Trivedi, 2020
Oxyopes jubilans O. Pickard-Cambridge, 1885	Junagadh	Parikh <i>et al.</i> , 2008
Oxyopes kamalae Gajbe, 1999	Panchmahal	Yadav <i>et al.</i> , 2017; Yadav & Kumar 2019
Oxyopes kohaensis Bodkhe & Vankhede, 2012	Mehsana	Prajapati et al., 2023
Oxyopes lineatipes (C.L. Koch, 1847	Navsari	Thumar, 2019
Oxyopes minutus Biswas, Kundu, Kundu, Saha & Raychaudhuri, 1996	Banaskantha, Kachchh, Sabarkantha	Parmar et al., 2015; Parmar, 2020
Oxyopes reddyi Majumder, 2004	Gujarat	Solanki, 2015
Oxyopes rufisternis Pocock, 1901	Vadodara	Siliwal et al., 2003b
Oxyopes rukminiae Gajbe, 1999	Gujarat	Yadav et al., 2017
Oxyopes ryvesi Pocock, 1901	Anand, Banaskantha, Bhavnagar, Mehsana, Sabarkantha	Patel, 1985; Parmar, 2013, 2018a, 2020; Parmar & Patel, 2015
Oxyopes salticus Hentz, 1845	Mehsana	Prajapati et al., 2023
Oxyopes shweta Tikader 1970	Amreli, Banaskantha, Bhavnagar, Dang, Junagadh, Kheda, Mehsana, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal <i>et al.</i> , 2003b Kumar & Shivakumar, 2004; Parikh <i>al.</i> , 2008; Trivedi, 2009; Bhatt, 2014 Solanki & Kumar, 2014; Suthar <i>et al.</i> 2017; Yadav & Kumar, 2019
Oxyopes sitae Tikader, 1970	Bhavnagar, Dang, Kheda, Mehsana, Sabarkantha, Surendranagar	Patel, 1971, 1978a, 1985; Sebastian, 1988; Bhatt, 2014
<i>Oxyopes sunandae</i> Tikader 1970	Bhavnagar, Kheda, Navsari	Patel, 1985; Bhatt, 2014; Prajapati <i>et al.</i> , 2018; Thumar, 2019
Oxyopes wroughtoni Pocock, 1901	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dang, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar, Vadodara, Valsad	Sherriffs, 1919, 1951; Patel, 1978a, 1985; Sebastian, 1988; Patel, 2003; Patel & Vyas, 2001; Parasharya & Pathan, 2013; Patel <i>et al.</i> , 2013
Peucetia akwadaensis, Patel, 1978	Anand, Bhavnagar, Junagadh, Mehsana, Panchmahal	Patel, 1978a, 1985; Parikh <i>et al.</i> , 200 Parmar, 2013, 2018a Solanki & Kum 2015; Solanki, 2015; Yadav, 2019; Solanki <i>et al.</i> , 2020

Family/Species	Distribution in districts	References
<i>Peucetia choprai</i> Tikader, 1965	Junagadh	Chatrabhuj, 2007
Peucetia elegans (Blackwall, 1864)	Banaskantha, Mehsana, Sabarkantha	Parmar, 2018a, 2020, 2021
<i>Peucetia graminea</i> Pocock, 1900	Valsad	Pocock, 1900
Peucetia latikaeTikader, 1970	Amreli, Banaskantha, Bhavnagar, Dang, Junagadh, Kheda, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar	Patel, 1978a, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Chatrabhuj, 2007; Bhatt, 2014; Parmar & Patel, 2015; Thumar, 2019
Peucetia viridana (Stoliczka, 1869)	Ahmedabad, Amreli, Dang, Kachchh, Mehsana, Navsari, Panchmahal, Patan, Vadodara	Mehta, 2001; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2006; Parmar <i>et al.</i> , 2015; Solanki & Kumar, 2015; Prajapati <i>et al.</i> , 2016c; Thumar, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020, Parmar <i>et al.</i> , 2023
Peucetia yogeshi Gajbe, 1999	Panchmahal	Solanki, 2015; Solanki et al., 2020
23. Palpimanidae		
<i>Palpimanus narsinhmehtai</i> Prajapati, Hun & Raval, 2021	Junagadh	Prajapati et al., 2021a
Sarascelis namratae (Pillai, 2006)	Bhavnagar, Panchmahal	Pillai, 2006; Yadav & Kumar, 2019
24. Philodromidae		
Philodromus assamensis Tikader, 1962	Vadodara	Siliwal, 2000
<i>Philodromus bhagirathai</i> Tikader, 1966	Dang	Siliwal et al., 2003b
Philodromus chambaensis Tikader, 1980	Bhavnagar	Patel, 1985
Philodromus decoratus Tikader, 1962	Panchmahal, Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988; Yadav, 2019
<i>Philodromus maliniae</i> Tikader, 1966	Bhavnagar	Patel, 1985
<i>Philodromus mohiniae</i> Tikader, 1966	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Thanatus dhakuricus Tikader, 1960	Dang, Panchmahal, Rajkot, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2006; Trivedi, 2009
Thanatus elongatus (Tikader, 1960)	Banaskantha, Dang, Navsari, Panchmahal, Sabarkantha, Surendranagar, Vadodara	Patel, 1971; Siliwal, 2000; Siliwal <i>et al.</i> , 2003a; Patel, 2003; Solanki, 2015; Yadav <i>et al.</i> , 2017; Thumar, 2019; Solanki <i>et al.</i> , 2020
<i>Tibellus chaturshingi</i> Tikader, 1962	Amreli, Bhavnagar, Junagadh	Patel & Pillai, 1988; Chatrabhuj, 2007
Tibellus pashanensis Tikader, 1980	Banaskantha, Dang, Sabarkantha, Surendranagar, Vadodara	Sebastian, 1988; Siliwal, 2000; Siliwal et al., 2003b
Tibellus pateli Tikader, 1980	Banaskantha, Bhavnagar, Dang, Mehsana, Panchmahal, Sabarkantha,	Tikader, 1980; Patel, 1985; Sebastian, 1988; Siliwal, 2000; Siliwal <i>et al.</i> , 2003a, b

Family/Species	Distribution in districts	References
	Surendranagar, Vadodara	
<i>Tibellus poonaensis</i> Tikader, 1962	Banaskantha, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar	Sebastian, 1988; Patel, 2003; Trivedi, 2009
25. Pholcidae		
Artema atlanta Walckenaer, 1837	Anand, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Vadodara	Patel, 1971, 1985; Siliwal, 2000; Patel & Vyas, 2001; Patel, 2003; Siliwal et al., 2003a, b; Chatrabhuj, 2007; Patel e al., 2012; Parmar & Acharya, 2015; Parmar & Patel, 2015; Suthar et al., 2017; Thumar, 2019
Crossopriza lyoni (Blackwall, 1867)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Vadodara	Patel, 1971, 1985; Siliwal, 2000; Patel & Vyas, 2001; Patel et al., 2012; Vachhani et al., 2012; Parmar, 2013, 2018a, 2020; Bhatt, 2014; Parmar & Acharya, 2015; Solanki & Kumar, 2015; Solanki, 2015; Prajapati et al., 2016c; Suthar et al., 2017; Yadav et al. 2017; Thumar, 2019; Yadav & Kumar, 2019; Solanki et al., 2020; Parmar et al., 2023
Pholcus fragillimus Strand, 1907	Panchmahal, Patan	Solanki & Kumar, 2015; Solanki, 2015 Yadav <i>et al.</i> , 2017; Yadav, 2019; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2022
Pholcus phalangioides (Fuesslin, 1775)	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha	Patel, 1971, 1985, 2002, 2003; Patel & Vyas, 2001; Chatrabhuj, 2007; Patel et al., 2012; Solanki & Kumar, 2015; Yadav et al., 2017; Parmar, 2018a, 2020, 2021; Thumar, 2019; Solanki et al., 2020; Parmar et al., 2023
Smeringopus pallidus (Blackwall, 1858)	Junagadh, Navsari	Trivedi, 2016; Thumar, 2019
26. Pisauridae		
Dendrolycosa bobbiliensis (Reddy & Patel, 1993)	Junagadh	Parikh <i>et al.</i> , 2008
Dendrolycosa gitae (Tikader, 1970)	Dang, Navsari, Panchmahal, Vadodara	Siliwal <i>et al.</i> , 2003a, b; Suthar <i>et al.</i> , 2017; Thumar, 2019; Yadav, 2019
<i>Nilus decorata</i> (Patel & Reddy, 1990	Junagadh	Parikh <i>et al.</i> , 2008
Nilus phipsoni (F.O. Pickard- Cambridge, 1898)	Panchmahal	Solanki, 2015; Solanki <i>et al.</i> , 2020
Perenethis venusta L. Koch, 1878	Navsari, Panchmahal	Solanki, 2015; Thumar, 2019; Solanki <i>et al.</i> , 2020
Pisaura podilensis Patel & Reddy, 1990	Junagadh, Panchmahal	Parikh <i>et al.</i> , 2008; Solanki & Kumar, 2015; Solanki <i>et al.</i> , 2020
Pisaura swamii Patel, 1987	Anand, Bhavnagar, Dang, Kachchh	Patel, 1987a; Mehta, 2001; Parmar, 2013; Parmar <i>et al.</i> , 2015
27. Prodidomidae		
Zimiris doriae Simon, 1882	Ahmedabad, Gandhinagar, Navsari	Thumar, 2019; Prajapati, 2021
28. Salticidae		
Afraflacilla banni Prajapati, Tatu & Kamboj, 2021	Kachchh	Prajapati et al., 2021b

Family/Species	Distribution in districts	References
Afraflacilla miajlarensis Tripathi, Jangid, Prajapati & Siliwal, 2022	Gandhinagar	Sudhin et al., 2022
Asemonea tenuipes (O. Pickard-Cambridge, 1869)	Dang, Navsari, Panchmahal, Vadodara	Siliwal <i>et al.</i> , 2003a, b; Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav, 2019; Yadav & Kumar, 2019
Bianor albobimaculatus (Lucas, 1846)	Patan	Parmar et al., 2023
Bianor balius Thorell, 1890	Anand	Ramanujam <i>et al.</i> , 2019; Raghunandan <i>et al.</i> , 2021
Bianor narmadaensis (Tikader, 1975)	Bhavnagar	Patel, 1985
Bianor pashanensis (Tikader, 1975)	Bhavnagar	Patel, 1985
Bianor punjabicus Logunov, 2001	Panchmahal	Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019
Brettus cingulatus Thorell, 1895	Navsari	Thumar, 2019
Carrhotus sannio (Thorell, 1877)	Banaskantha, Mehsana, Sabarkantha	Parmar, 2018a, 2020
Carrhotus viduus (C.L. Koch, 1846)	Amreli, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh; Kachchh, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Mehta, 2001; Patel & Vyas, 2001; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Parmar, 2020, 2021
Chrysilla lauta Thorell, 1887	Mehsana	Parmar & Patel, 2017, 2018; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2021
Chrysilla volupe (Karsch, 1879)	Kheda, Mehsana, Navsari, Patan	Prajapati <i>et al.</i> , 2018; Thumar & Dholakia, 2018; Prajapati <i>et al.</i> , 2023; Parmar <i>et al.</i> , 2023
<i>Cyrba ocellata</i> (Kroneberg, 1875)	Mehsana, Patan	Prajapati <i>et al.</i> , 2023; Parmar <i>et al.</i> , 2023
Epeus indicus Prószyński, 1992	Anand, Banaskantha, Kachchh, Mehsana, Navsari, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar <i>et al.</i> , 2015; Yadav <i>et al.</i> , 2017; Parmar & Patel, 2018; Prajapati <i>et al.</i> , 2018; Thumar, 2019
Epocilla aura (Dyal, 1935)	Ahmedabad, Amreli, Banaskantha, Bhavnagar, Dang, Junagadh, Jamnagar, Mehsana, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar	Patel, 1971, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Mehta, 2001; Chatrabhuj, 2007; Solanki, 2015; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Epocilla aurantiaca (Simon, 1885)	Ahmedabad, Anand, Banaskantha, Kheda, Mehsana, Navsari, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Prajapati <i>et al.</i> , 2016c; Parmar & Patel, 2018; Thumar, 2019
Harmochirus brachiatus (Thorell, 1877)	Bhavnagar, Junagadh, Navsari, Panchmahal, Patan, Vadodara	Patel, 1985; Siliwal & Kumar, 2003b; Kumar & Shivakumar, 2004; Trivedi, 2016; Thumar, 2019; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Hasarius adansoni (Audouin, 1825)	Ahmedabad, Amreli, Banaskantha, Kachchh,	Parmar <i>et al.</i> , 2015; Solanki & Kumar, 2015; Solanki, 2015; Prajapati <i>et al.</i> ,

nily/Species	Distribution in districts	References
	Mehsana, Panchmahal, Patan, Sabarkantha	2016c; Yadav <i>et al.</i> , 2017; Parmar, 2021; Parmar & Patel, 2018; Thumar, 2019; Yadav & Kumar, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Hyllus semicupreus (Simon, 1885)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha, Surendranagar	Tikader 1974; Patel, 1985; Siliwal <i>et al.</i> , 2003b; Chatrabhuj, 2007; Parmar, 2013, 2020; Parmar & Acharya, 2015; Solanki & Kumar, 2015; Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Parmar & Patel, 2018; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020; Chandra <i>et al.</i> , 2021; Parmar <i>et al.</i> , 2023
<i>Icius alboterminus</i> (Caleb, 2014)	Anand, Jamnagar, Kheda, Mehsana, Patan	Parmar, 2018a; Prajapati & Kamboj, 2020a; Parmar <i>et al.</i> , 2023
Langelurillus onyx Caleb, Sanap, Joglekar & Prajapati, 2017	Narmada	Sanap <i>et al.</i> , 2017
Marengo sachintendulkar Malamel, Prajapati, Sudhikumar & Sebastian, 2019	Ahmedabad, Patan	Malamel <i>et al.</i> , 2019; Parmar <i>et al.</i> , 2023
Menemerus bivittatus (Dufour, 1831)	Ahmedabad, Amreli, Anand, Banaskantha, Kachchh, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar et al., 2015; Solanki & Kumar, 2015; Prajapati et al., 2016c; Parmar & Patel 2017, 2018; Yadav et al., 2017; Prajapet al., 2018; Thumar, 2019; Yadav, 20 Dal & Trivedi, 2020; Chandra et al., 2021; Parmar et al., 2023
Menemerus fulvus (L. Koch, 1878)	Banaskantha, Mehsana, Navsari, Sabarkantha	Parmar, 2018a, 2020, 2021; Parmar & Patel, 2018; Thumar, 2019
Myrmaplata plataleoides (O. Pickard-Cambridge, 1869)	Ahmedabad, Anand, Banaskantha, Kachchh, Mehsana, Navsari, Patan, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Parmar & Patel, 2018; Thumar, 2019; Parmar <i>et al.</i> , 2023
Myrmarachne laeta (Thorell, 1887)	Anand	Patel, 1971; Parasharya & Pathan, 201
Myrmarachne melanocephala MacLeay, 1839	Ahmedabad, Bhavnagar, Junagadh, Mehsana, Panchmahal, Patan, Vadodara	Patel, 1985; Parikh <i>et al.</i> , 2008; Prajapati <i>et al.</i> , 2016c; Yadav, 2019; Chandra <i>et al.</i> , 2021; Prajapati <i>et al.</i> , 2023; Parmar <i>et al.</i> , 2023
Myrmarachne poonaensis Tikader, 1973	Mehsana, Sabarkantha	Sebastian, 1988
Myrmarachne prava (Karsch, 1880)	Bhavnagar, Dang, Kheda, Mehsana, Sabarkantha, Vadodara	Patel, 1985; Siliwal <i>et al.</i> , 2003a, b; Kumar & Shivakumar, 2006; Bhatt, 2014; Parmar & Patel, 2015
Myrmarachne robusta (G.W. Peckham & E.G. Peckham, 1892)	Sabarkantha, Vadodara	Sebastian, 1988; Siliwal, 2000; Siliwa et al., 2003b; Kumar & Shivakumar, 2006
Myrmarachne tristis (Simon, 1882)	Mehsana, Panchmahal	Solanki & Kumar, 2015; Solanki, 2015; Parmar, 2018a; Parmar & Patel, 2018; Solanki <i>et al.</i> , 2020
Orientattus aurantius (Kanesharatnam & Benjamin, 2018)	Patan	Parmar et al., 2023

ily/Species	Distribution in districts	References
Phaeacius lancearius (Thorell, 1895)	Ahmedabad	Chandra et al., 2021
<i>Phidippus bengalensis</i> Tikader, 1977	Bhavnagar, Junagadh, Kheda	Patel, 1985; Parikh <i>et al.</i> , 2008; Bhatt, 2014
Phidippus calcuttaensis Biswas, 1984	Panchmahal, Vadodara	Siliwal, 2000; Yadav, 2019
Phidippus punjabensis Tikader, 1974	Banaskantha, Bhavnagar, Mehsana, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Sebastian, 1988; Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Solanki & Kumar, 2014
<i>Phintella debilis</i> (Thorell, 1891)	Navsari	Thumar, 2019
Phintella vittata (C.L. Koch, 1846)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dang, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha, Vadodara	Patel, 1971, 1985; Siliwal, 2000; Siliwal <i>et al.</i> , 2003a, b; Kumar & Shivakumar, 2004; Solanki & Kumar, 2015; Prajapati <i>et al.</i> , 2016c, 2018; Parmar & Patel, 2018; Thumar, 2019; Yadav, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Phintelloides undulatus (Caleb & Karthikeyani, 2015)	Ahmedabad, Kheda, Navsari, Patan	Prajapati & Kamboj, 2020b; Parmar <i>et al.</i> , 2023
Phintelloides versicolor (C.L. Koch, 1846)	Mehsana, Navsari	Thumar, 2019; Prajapati et al., 2023
Phlegra abhinandanvarthamani Prajapati, 2019	Ahmedabad	Prajapati, 2019
Phlegra dhakuriensis (Tikader, 1974)	Anand, Banaskantha, Junagadh, Kheda, Mehsana, Rajkot, Sabarkantha, Surendranagar	Sebastian, 1988; Trivedi, 2009, 2016; Parmar, 2013, 2018a, 2020; Bhatt, 2014; Parmar & Patel, 2017, 2018
<i>Phlegra prasanna</i> Caleb & Mathai, 2015	Patan	Parmar et al., 2023
<i>Piranthus decorus</i> Thorell, 1895	Navsari	Thumar, 2019
<i>Plexippus clemens</i> (O. Pickard-Cambridge, 1872)	Jamnagar, Patan	Prajapati <i>et al.</i> , 2021c; Parmar <i>et al.</i> , 2023
Plexippus paykulli (Audouin, 1825)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Patel & Pillai, 1988; Patel & Vyas, 2001; Siliwal et al., 2003b; Parikh et al., 2008; Trivedi, 2009; Pate et al., 2012; Parmar & Acharya, 2015; Parasharya & Pathan, 2013; Bhatt, 2014; Solanki & Kumar, 2014, 2015; Parmar et al., 2015; Solanki, 2015; Prajapati et al., 2016c; Parmar & Patel, 2018; Prajapati et al., 2018; Yadav & Kumar, 2019; Dal & Trivedi, 2020; Solanki et al., 2020; Chandra et al., 2021; Parmar et al., 2023
Plexippus petersi (Karsch, 1878)	Ahmedabad, Banaskantha, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Siliwal, 2000; Solanki, 2015; Prajapati <i>et al.</i> , 2016c; Thumar, 2019; Yadav, 2019; Parmar, 2020; Solanki <i>et al.</i> , 2020
<i>Pseudamycus himalaya</i> (Tikader, 1967)	Bhavnagar	Patel, 1985

mily/Species	Distribution in districts	References
Pseudicius andamanius (Tikader, 1977)	Amreli, Mehsana, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988
Rhene albigera (C.L. Koch, 1846)	Panchmahal	Solanki & Kumar, 2015; Solanki, 2015; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020
Rhene flavigera (C.L. Koch, 1846)	Anand, Bhavnagar, Dang, Kheda, Navsari	Patel, 1985; Siliwal <i>et al.</i> , 2003b; Parmar, 2013; Parmar & Acharya, 2015; Thumar, 2019
Rhene rubrigera (Thorell, 1887)	Ahmedabad	Chandra et al., 2021
Rudakius ludhianaensis (Tikader, 1974)	Bhavnagar, Patan, Valsad	Patel, 1985; Parmar et al., 2023
Siler semiglaucus (Simon, 1901)	Anand, Banaskantha, Kachchh, Mehsana, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2018
Stenaelurillus albus Sebastian, Sankaran, Malamel & Joseph, 2015	Panchmahal	Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019
Stenaelurillus arambagensis (B. Biswas & K. Biswas, 1992)	Patan, Sabarkantha	Prajapati <i>et al.</i> , 2016b; Parmar <i>et al.</i> , 2023
Stenaelurillus gabrieli Prajapati, Murthappa, Sankaran & Sebastian, 2016	Ahmedabad, Navsari, Valsad	Prajapati et al., 2016b
Stenaelurillus jagannathae Das, Malik & Vidhel, 2015	Amreli	Dal & Trivedi, 2020
Stenaelurillus lesserti Reimoser, 1934	Banaskantha, Mehsana, Sabarkantha	Parmar & Patel, 2017, 2018; Parmar, 2018a, 2020, 2021
<i>Tanzania yellapragadai</i> Prajapati & Dudhatra, 2022	Rajkot	Prajapati & Dudhatra, 2022
Telamonia dimidiata (Simon, 1899)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dang, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara	Tikader 1974; Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Siliwal et al., 2003a, b; Kumar & Shivakumar, 2006; Pradipkumar, 2009; Trivedi, 2009; Parmar, 2013; Solanki & Kumar, 2015; Prajapati et al., 2016c, 2018; Parmar & Patel, 2018; Yadav & Kumar, 2019; Solanki et al., 2020; Parmar et al., 2023
Thiania bhamoensis Thorell, 1887	Kachchh, Junagadh	Chatrabhuj, 2007; Parmar et al., 2015
Thyene imperialis (Rossi, 1846)	Ahmedabad, Amreli, Anand, Banaskantha, Kachchh, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha	Parmar, 2013, 2018a, 2020, 2021; Solanki & Kumar, 2015; Solanki, 2015 Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Parmar & Patel, 2018; Yadav, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Scytodidae		
Scytodes fusca Walckenaer, 1837	Dang, Navsari, Panchmahal, Patan, Vadodara	Siliwal <i>et al.</i> , 2003b; Solanki & Kumar 2015; Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023

Family/Species	Distribution in districts	References
Scytodes kinsukus Patel, 1975	Amreli, Anand, Banaskantha, Bhavnagar, Junagadh, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar, Valsad	Patel, 1975c, 1985, 2003; Patel & Pillai, 1988; Sebastian, 1988; Patel & Vyas, 2001; Patel, 2003; Parikh <i>et al.</i> , 2008; Parasharya & Pathan, 2013
Scytodes pallida Doleschall, 1859	Navsari, Panchmahal	Solanki, 2015; Thumar, 2019; Yadav, 2019; Solanki <i>et al.</i> , 2020
Scytodes propinqua Stoliczka, 1869	Panchmahal, Vadodara	Siliwal, 2000; Yadav, 2019
Scytodes thoracica (Latreille, 1802)	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Dahod, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Surendranagar, Vadodara, Valsad	Patel, 1975c, 2002, 2003; Patel & Pillai, 1988; Siliwal <i>et al.</i> , 2003a, b; Parmar, 2013, 2018a, 2020; Bhatt, 2014; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Suther <i>et al.</i> , 2017; Prajapati <i>et al.</i> , 2018; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Scytodes univittata Simon, 1882	Vadodara	Siliwal, 2000
30. Segestriidae		
<i>Ariadna vansda</i> Siliwal, Yadav & Kumar, 2017	Navsari	Siliwal et al., 2017
31. Selenopidae		
Selenops radiatus Latreille, 1819	Anand, Bhavnagar, Kheda, North Gujarat, Panchmahal, Vadodara	Pocock, 1900; Patel & Patel, 1973a, 1985; Bhatt, 2014; Yadav, 2019
32. Sicariidae		
Loxosceles rufescens (Dufour, 1820)	Amreli, Banaskantha, Bharuch, Bhavnagar, Dang, Junagadh, Kheda, Mehsana, Panchmahal, Rajkot, Sabarkantha	Patel, 1985; Mehta, 2001; Chatrabhuj, 2007; Solanki, 2015; Trivedi & Dal, 2019; Parmar, 2020; Solanki <i>et al.</i> , 2020
33. Sparassidae		
Eusparassus xerxes (Pocock, 1901	Bhavnagar, Junagadh, Dang	Sethi & Tikader, 1988; Mehta, 2001; Chatrabhuj, 2007
<i>Gnathopalystes flavidus</i> (Simon, 1897)	Bhavnagar, Dang, Junagadh	Patel, 1985; Mehta, 2001; Chatrabhuj, 2007
Heteropoda bhaikakai Patel & Patel, 1973	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel & Patel, 1973a; Patel, 1985; Patel & Pillai, 1988; Patel & Vyas, 2001; Patel, 2003; Siliwal <i>et al.</i> , 2003b; Bhatt, 2014; Parmar <i>et al.</i> , 2015; Solanki, 2015; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020
Heteropoda nilgirina, Pocock, 1901	Anand, Kheda, Navsari	Parmar, 2013; Parmar & Acharya, 2015; Thumar, 2019
Heteropoda phasma Simon, 1897	Anand, Dang, Kheda	Patel, 1971; Patel & Patel, 1973a
<i>Heteropoda robusta</i> Fage, 1924	Dang, Junagadh	Mehta, 2001; Chatrabhuj, 2007
Heteropoda sexpunctata Simon, 1885	Dang, Mehsana, Sabarkantha, Surat, Surendranagar	Sebastian, 1988; Sethi & Tikader, 1988; Mehta, 2001

Family/Species	Distribution in districts	References
Heteropoda venatoria (Linnaeus, 1767)	Ahmedabad, Banaskantha, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha	Mehta, 2001; Bhatt, 2014; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Parmar, 2020, 2021; Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Olios bhavnagarensis Sethi & Tikader, 1988	Banaskantha, Bhavnagar, Junagadh, Mehsana, Panchmahal, Sabarkantha, Vadodara	Sethi & Tikader, 1988; Siliwal <i>et al.</i> , 2003b; Chatrabhuj, 2007; Solanki, 2015; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Yadav, 2019; Solanki <i>et al.</i> , 2020
Olios gravelyi Sethi & Tikader, 1988	Panchmahal, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Solanki, 2015; Yadav & Kumar, 2019; Solanki <i>et al.</i> , 2020
Olios kiranae Sethi & Tikader, 1988	Bhavnagar, Dang, Kheda, Sabarkantha	Sethi & Tikader, 1988; Sebastian, 1988; Mehta, 2001; Pradipkumar, 2009
Olios milleti (Pocock, 1901)	Ahmedabad, Banaskantha, Bhavnagar, Dang, Kachchh, Mehsana, Navsari, Panchmahal, Patan, Sabarkantha	Patel, 1985; Sethi & Tikader, 1988; Mehta, 2001; Parmar et al., 2015; Solanki & Kumar, 2015; Prajapati et al., 2016c; Yadav et al., 2017; Parmar, 2018a, 2020, 2021; Yadav & Kumar, 2019; Solanki et al., 2020; Parmar et al., 2023
Olios obesulus (Pocock, 1901)	Banaskantha, Bhavnagar, Dang, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Mehta, 2001
Olios punctipes Simon, 1884	Bhavnagar, Dang	Patel, 1985; Mehta, 2001
Olios stimulator (Simon, 1897)	Banaskantha, Bhavnagar, Dang, Junagadh, Kachchh, Mehsana, Sabarkantha	Patel, 1985; Mehta, 2001; Chatrabhuj, 2007; Parmar <i>et al.</i> , 2015; Parmar, 2018a, 2020, 2021
Olios tener (Thorell, 1891)	Bhavnagar, Dang, Mehsana, Panchmahal	Patel, 1985; Mehta, 2001; Parmar & Patel, 2015; Yadav, 2019
Olios tikaderi Kundu, Biswas & Raychaudhuri, 1999	Mehsana	Parmar, 2018a
Olios wroughtoni (Simon, 1897)	Banaskantha, Mehsana, Panchmahal, Sabarkantha, Valsad	Pocock, 1900; Gravely, 1931; Sethi & Tikader, 1988; Solanki, 2015; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020
Spariolenus tigris Simon, 1880	Junagadh	Chatrabhuj, 2007
34. Stenochilidae		
Stenochilus hobsoni O. Pickard-Cambridge, 1871	Panchmahal	Solanki, 2015; Yadav, 2019; Solanki <i>et al.</i> , 2020
35. Tetragnathidae		
Leucauge celebesiana (Walckenaer, 1841)	Bhavnagar, Kheda, Navsari	Patel, 1985, 2003; Pradipkumar, 2009
Leucauge decorata (Blackwall, 1864)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Patan, Rajkot, Sabarkantha, Vadodara, Valsad	Patel, 1971, 1985, 2003; Patel & Vyas, 2001; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004; Patel <i>et al.</i> , 2012; Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Parasharya & Pathan, 2013; Solanki & Kumar, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Suthar <i>et al.</i> , 2017; Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav & Kumar, 2019;

Family/Species	Distribution in districts	References
		Solanki <i>et al.</i> , 2020; Parmar <i>et al.</i> , 2023
Leucauge dorsotuberculata Tikader, 1982	Junagadh	Chatrabhuj, 2007
Leucauge fastigata (Simon, 1877)	Navsari, Panchmahal	Thumar, 2019; Yadav, 2019
Leucauge tessellata (Thorell, 1887)	Dahod, Dang, Junagadh, Navsari	Patel, 1975b; Siliwal <i>et al.</i> , 2003b; Patel, 2003; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012; Suthar <i>et al.</i> , 2017
Orsinome vethi (van Hasselt, 1882)	Vadodara	Kumar & Shivakumar, 2004; Solanki & Kumar, 2014
<i>Tetragnatha andamanensis</i> Tikader, 1977	Vadodara	Siliwal et al., 2003b
<i>Tetragnatha ceylonica</i> O. Pickard-Cambridge, 1869	Bhavnagar, Dang	Patel, 1971, 1985
Tetragnatha extensa (Linnaeus, 1758)	Mehsana, Panchmahal	Solanki, 2015; Parmar & Patel, 2017; Parmar, 2018a, 2021; Solanki <i>et al.</i> , 2020
<i>Tetragnatha fletcheri</i> Gravely, 1921	Bhavnagar, Dang, Navsari, Rajkot	Patel, 1971, 1985; Patel & Vyas, 2001; Patel, 2003
Tetragnatha javana (Thorell, 1890	Ahmedabad, Anand, Bhavnagar, Kheda, Navsari, Vadodara	Patel, 1985, 2003; Pradipkumar, 2009; Patel <i>et al.</i> , 2013; Siliwal <i>et al.</i> , 2003b; Chandra <i>et al.</i> , 2021; Raghunandan <i>et al.</i> , 2021
Tetragnatha keyserlingi Simon, 1890	Ahmedabad, Banaskantha, Bhavnagar, Dahod, Dang, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Patel, 1985, 2003; Mehta, 2001; Patel & Vyas, 2001; Pradipkumar, 2009; Patel et al., 2012; Parmar, 2018a; Yadav, 2019; Solanki et al., 2020; Chandra et al., 2021
Tetragnatha mandibulata Walckenaer, 1841	Anand, Banaskantha, Bhavnagar, Dahod, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Patel, 1985; Patel & Vyas, 2001; Patel, 2003; Patel <i>et al.</i> , 2012; Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Solanki, 2015; Prajapati <i>et al.</i> , 2018; Solanki <i>et al.</i> , 2020
Tetragnatha nitens (Savigny, 1825)	Ahmedabad	Chandra <i>et al.</i> , 2021
Tetragnatha sutherlandi Gravely, 1921	Kheda, Navsari, Rajkot	Patel & Vyas, 2001; Pradipkumar, 2009; Patel <i>et al.</i> , 2013
Tetragnatha vermiformis Emerton, 1884	Ahmedabad	Chandra <i>et al.</i> , 2021
Tetragnatha viridorufa Gravely, 1921	Anand, Banaskantha, Kachchh, Kheda, Mehsana, Sabarkantha	Parmar, 2013, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015
Tylorida striata (Thorell, 1877)	Ahmedabad, Anand, Vadodara	Patel, 1971; Kulkarni & Yadav, 2015
Tylorida ventralis (Thorell, 1877)	Anand, Banaskantha, Kachchh, Mehsana, Panchmahal, Sabarkantha	Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015; Solanki, 2015; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020
36. Theraphosidae		
Chilobrachys fimbriatus Pocock, 1899	Navsari	Singh <i>et al.</i> , 2000; Parasharya <i>et al.</i> , 2011
Neoheterophrictus smithi Mirza, Bhosale & Sanap, 2014	Narmada	Bhatt et al., 2022

Family/Species	Distribution in districts	References
Plesiophrictus millardi Pocock, 1899	Navsari	Bharat et al., 2014; Parmar et al., 2014
<i>Poecilotheria regalis</i> Pocock, 1899	Dang	Parasharya et al., 2011
37. Theridiidae		
<i>Achaearanea budana</i> Tikader, 1970	Bhavnagar, Vadodara	Patel, 1985; Siliwal, 2000; Siliwal <i>et al.</i> , 2003b
<i>Achaearanea durgae</i> Tikader, 1970	Kachchh, Mehsana, Vadodara	Siliwal, 2000; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015; Parmar, 2018a
Achaearanea triangularis Patel, 2005	Banaskantha, Mehsana, Sabarkantha	Parmar, 2018a, 2020
<i>Argyrodes ambalikae</i> Tikader, 1970	Dang, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003a, b
Argyrodes antipodianus O. Pickard-Cambridge, 1880	Navsari	Thumar, 2019
Argyrodes argentatus O. Pickard-Cambridge, 1880	Ahmedabad, Anand, Banaskantha, Mehsana, Panchmahal, Patan, Sabarkantha	Parmar, 2013, 2020, 2021; Parmar & Patel, 2015; Solanki & Kumar, 2015; Solanki, 2015; Solanki <i>et al.</i> , 2020; Chandra <i>et al.</i> , 2021; Parmar <i>et al.</i> , 2023
<i>Argyrodes chiriatapuensis</i> Tikader, 1977	Bhavnagar	Patel, 1985
Argyrodes cyrtophorae Tikader, 1963	Dang, Kheda, Mehsana, Sabarkantha, Surendranagar	Patel, 1973; Sebastian, 1988; Bhatt, 2014
Argyrodes dipali Tikader, 1963	Anand, Bhavnagar, Mehsana, Navsari, Sabarkantha	Patel, 1973, 1985, 2003; Sebastian, 1988; Parasharya & Pathan, 2013; Yadav <i>et al.</i> , 2017
Argyrodes flavescens O. Pickard-Cambridge, 1880	Banaskantha, Kachchh, Panchmahal, Sabarkantha	Siliwal, 2000; Parmar <i>et al.</i> , 2015; Yadav, 2019; Parmar, 2020, 2021
Argyrodes gazedes Tikader, 1970	Anand, Bhavnagar, Dang, Navsari, Vadodara	Patel, 1973, 1985, 2003; Siliwal, 2000; Mehta, 2001; Siliwal <i>et al.</i> , 2003b
Argyrodes gazingensis Tikader, 1970	Dang	Siliwal et al., 2003b
Argyrodes jamkhedes Tikader, 1963	Dang, Mehsana, Navsari, Sabarkantha, Surendranagar	Patel, 1973, 2003; Sebastian, 1988; Yadav <i>et al.</i> , 2017
Argyrodes projeles Tikader, 1970	Bhavnagar, Dahod, Panchmahal, Surendranagar, Vadodara	Patel, 1985; Sebastian, 1988; Siliwal, 2000; Patel, 2002; Siliwal <i>et al.</i> , 2003b; Yadav, 2019
Cephalobares globiceps O. Pickard-Cambridge, 1871	Panchmahal	Solanki, 2015; Yadav <i>et al.</i> , 2017; Yadav, 2019
Chrysso angula (Tikader, 1970)	Banaskantha, Bhavnagar, Mehsana, Sabarkantha	Patel, 1985; Parmar, 2018a, 2020, 2021
Coleosoma blandum O. Pickard-Cambridge, 1882	Amreli, Bhavnagar, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988; Solanki, 2015; Thumar, 2019; Solanki et al., 2020
Coleosoma floridanum Banks, 1900	Navsari	Thumar, 2019
Cyllognatha surajbe Patel & Patel, 1972	Bhavnagar, Dahod, Dang, Junagadh, Kheda, Navsari,	Patel & Patel, 1972; Patel, 1985; Patel & Vyas, 2001; Patel, 2002, 2003;

nily/Species	Distribution in districts	References
	Rajkot	Parikh et al., 2008; Patel et al., 2012
Faiditus xiphias (Thorell, 1887)	Dang, Vadodara	Siliwal, 2000; Siliwal et al., 2003b
Latrodectus geometricus C.L. Koch, 1841	Ahmedabad, Anand, Kachchh, Panchmahal	Vasava et al., 2015; Yadav, 2019
Latrodectus hasselti Thorell, 1870	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Junagadh, Kachchh, Kheda, Mehsana, Narmada, Navsari, Patan, Panchmahal, Patan, Rajkot, Surat, Surendranagar, Vadodara	Patel, 1971, 1973, 1985, 1987, 1999, 2002; Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Siliwal & Kumar, 2001 Patel & Vyas, 2001; Parasharya & Pathan, 2013; Parmar et al., 2015; Solanki, 2015; Parasharya et al., 2018 Solanki et al., 2020; Parmar et al., 2020
Meotipa argyrodiformis (Yaginuma, 1952)	Navsari	Thumar, 2019
<i>Meotipa picturata</i> Simon, 1895	Panchmahal	Solanki, 2015; Yadav <i>et al.</i> , 2017; Solanki <i>et al.</i> , 2020
<i>Meotipa sahyadri</i> Kulkarni, Vartak, Deshpande & Halali, 2017	Bharuch	Kulkarni et al., 2017
Nesticodes rufipes (Lucas, 1846)	Navsari	Thumar, 2019
<i>Nihonhimea indica</i> (Tikader, 1977)	Junagadh	Parikh et al., 2008
Nihonhimea mundula (L. Koch, 1872)	Ahmedabad, Navsari, Panchmahal	Solanki & Kumar, 2015; Solanki, 201 Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav, 2019; Solanki <i>et al.</i> , 2020
Nihonhimea tikaderi (Patel, 1973)	Amreli, Anand, Banaskantha, Bhavnagar, Dahod, Dang, Mehsana, Navsari, Rajkot, Sabarkantha, Surendranagar	Patel, 1973, 1985, 2002, 2003; Patel & Pillai, 1988; Sebastian, 1988; Sebastian, 1988; Patel & Vyas, 2001; Patel et al., 2012
Parasteatoda tepidariorum (C.L. Koch, 1841)	Anand, Kheda, Mehsana	Parmar, 2013, 2021; Parmar & Acharya, 2015
Rhomphaea projiciens O. Pickard-Cambridge, 1896	Anand, Banaskantha, Bhavnagar, Dang, Mehsana, Navsari, Panchmahal, Sabarkantha	Patel, 1973, 1985; Patel & Pillai, 1985; Sebastian, 1988; Patel, 2003; Solanki 2015; Yadav <i>et al.</i> , 2017; Solanki <i>et al.</i> 2020
Theridion manjithar Tikader, 1970	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Kheda, Mehsana, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1973, 1985; Patel & Pillai, 1985; Sebastian, 1988; Siliwal, 2000; Siliwa et al., 2003b; Kumar & Shivakumar, 2004; Pradipkumar, 2009; Trivedi, 2009; Yadav, 2019
<i>Theridion melanostictum</i> O. Pickard-Cambridge, 1876	Amreli	Dal & Trivedi, 2020
Thwaitesia dangensis Patel & Patel, 1972	Dahod, Dang, Navsari	Patel & Patel, 1972; Patel, 2002, 200
Yaginumena maculosa (Yoshida & Ono, 2000)	Panchmahal	Solanki, 2015; Solanki <i>et al.</i> , 2020

Family/Species	Distribution in districts	References
38. Thomisidae		
Amyciaea forticeps (O. Pickard-Cambridge, 1873)	Navsari, Panchmahal	Patel, 2003; Solanki, 2015; Thumar, 2019; Yadav, 2019; Solanki <i>et al.</i> , 2020
Angaeus zhengi (Tang & Li, 2009)	Navsari	Thumar <i>et al.</i> , 2021
Camaricus formosus Thorell, 1887	Ahmedabad	Chandra et al., 2021
Camaricus khandalaensis Tikader, 1980	Dang, Junagadh	Siliwal <i>et al.</i> , 2003b; Chatrabhuj, 2007; Yadav <i>et al.</i> , 2017
Ebrechtella concinna (Thorell, 1877)	Anand, Kheda	Parmar, 2013; Parmar & Acharya, 2015
Henriksenia hilaris (Thorell, 1877)	Banaskantha, Bhavnagar, Dang, Mehsana, Sabarkantha, Surendranagar	Patel, 1985; Sebastian, 1988; Mehta, 2001
Indoxysticus minutus (Tikader, 1960)	Ahmedabad, Anand, Banaskantha, Bhavnagar, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Patel, 1971, 1985; Patel, 2003; Siliwal et al., 2003a, b; Chatrabhuj, 2007; Parmar, 2013, 2018a, 2020; Bhatt, 2014; Parmar & Acharya, 2015; Parmar et al., 2015; Solanki & Kumar, 2015; Prajapati et al., 2016c; Yadav et al., 2017; Solanki et al., 2020
Misumena mridulai Tikader, 1962	Banaskantha, Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Misumenops khandalaensis Tikader, 1965	Junagadh, Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988; Chatrabhuj, 2007
<i>Monaeses mukundi</i> Tikader, 1980	Navsari	Patel, 2003
Monaeses parvati Tikader, 1963	Anand, Dang, Mehsana, Sabarkantha, Surendranagar, Vadodara	Patel, 1971; Sebastian, 1988; Siliwal, 2000; Siliwal <i>et al.</i> , 2003b
Oxytate elongata (Tikader, 1980)	Ahmedabad, Dang, Navsari, Vadodara	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Prajapati <i>et al.</i> , 2016c
Oxytate virens (Thorell, 1891)	Anand, Kachchh, Mehsana, Navsari	Parmar, 2013; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015; Thumar, 2019
<i>Ozyptila chandosiensis</i> Tikader, 1980	Mehsana, Sabarkantha	Sebastian, 1988
Ozyptila manii Tikader, 1961	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
<i>Ozyptila maratha</i> Tikader, 1971	Amreli, Bhavnagar, Dang, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel, 1971; Patel & Pillai, 1988; Sebastian, 1988
Ozyptila reenae Basu, 1964	Dang	Mehta, 2001
<i>Runcinia ghorpadei</i> Tikader, 1980	Dang	Siliwal et al., 2003b; Yadav et al., 2017
Runcinia insecta (L. Koch, 1875)	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Dang, Mehsana, Navsari, Sabarkantha, Surendranagar, Vadodara	Patel, 1971, 1985; Patel & Pillai, 1988; Sebastian, 1988; Dhulia & Yadav, 1991; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004; Parasharya & Pathan, 2013; Patel <i>et al.</i> , 2013; Prajapati <i>et al.</i> , 2016c; Suthar <i>et al.</i> ,

Family/Species	Distribution in districts	References
		2017; Chandra et al., 2021
<i>Runcinia roonwali</i> Tikader, 1965	Gujarat	Yadav et al., 2017
Synema decoratum Tikader, 1960	Anand, Banaskantha, Kachchh, Kheda, Mehsana, Panchmahal, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2017; Yadav <i>et al.</i> , 2017; Yadav, 2019
Thomisus andamanensis Tikader 1980	Dang, Navsari	Mehta, 2001; Thumar, 2019
Thomisus bulani Tikader, 1960	Navsari, Valsad	Patel, 2003; Patel, 2003; Siliwal <i>et al.</i> , 2003b
<i>Thomisus dhakuriensis</i> Tikader, 1960	Panchmahal, Vadodara	Kumar & Shivakumar, 2006; Yadav, 2019
Thomisus elongatus Stoliczka, 1869	Amreli, Bhavnagar, Dang, Mehsana, Panchmahal, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988; Siliwal <i>et al.</i> , 2003b; Solanki & Kumar, 2015; Solanki, 2015
<i>Thomisus katrajghatus</i> Tikader, 1963	Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988
Thomisus krishnae Reddy & Patel, 1992	Panchmahal, Vadodara	Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Kumar & Shivakumar, 2004; Yadav, 2019
Thomisus lobosus Tikader, 1965	Anand, Banaskantha, Bhavnagar, Kachchh, Mehsana, Navsari, Sabarkantha	Patel, 1985; Parmar, 2013, 2018a, 2020, 2021; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015; Thumar, 2019
<i>Thomisus pooneus</i> Tikader, 1965	Junagadh, Kheda	Chatrabhuj, 2007; Pradipkumar, 2009
Thomisus projectus Tikader, 1960	Anand, Banaskantha, Bhavnagar, Dang, Kachchh, Mehsana, Navsari, Sabarkantha	Patel, 1971, 1985; Dhulia & Yadav, 1991; Patel, 2003; Trivedi, 2009; Parmar, 2013, 2018a, 2020, 2021; Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015
Thomisus pugilis Stoliczka, 1869	Ahmedabad, Amreli, Banaskantha, Bhavnagar, Dang, Mehsana, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1985; Patel & Pillai, 1988; Sebastian, 1988; Siliwal, 2000; Siliwal et al., 2003b; Trivedi, 2009; Solanki & Kumar, 2014; Prajapati et al., 2016c
Thomisus shivajiensis Tikader, 1965	Bhavnagar, Dang, Junagadh, Mehsana, Vadodara	Patel, 1985; Siliwal, 2000; Siliwal <i>et al.</i> , 2003a, b; Chatrabhuj, 2007; Solanki & Kumar, 2014; Parmar & Patel, 2015
Thomisus spectabilis Doleschall, 1859	Anand, Mehsana, Navsari, Patan	Ramanujam <i>et al.</i> , 2019; Thumar, 2019; Raghunandan <i>et al.</i> , 2021; Prajapati <i>et al.</i> , 2023; Parmar <i>et al.</i> , 2023
<i>Tmarus kotigeharus</i> Tikader, 1963	Dang, Banaskantha, Navsari, Valsad	Patel, 1971; Patel, 2003; Yadav <i>et al.</i> , 2017; Patel <i>et al.</i> , 2012
Xysticus bengalensis Tikader & Biswas, 1974	Junagadh, Mehsana, Sabarkantha, Surendranagar	Sebastian, 1988; Parikh et al., 2008
<i>Xysticus breviceps</i> O. Pickard-Cambridge, 1885	Anand, Kachchh, Mehsana	Parmar, 2013; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015
Xysticus croceus Fox, 1937	Amreli, Bhavnagar, Mehsana, Rajkot,	Patel & Pillai, 1988; Sebastian, 1988

Family/Species	Distribution in districts	References
	Sabarkantha, Surendranagar	
Xysticus himalayaensis Tikader & Biswas, 1974	Mehsana, Sabarkantha	Sebastian, 1988
<i>Xysticus joyantius</i> Tikader, 1966	Anand	Parmar, 2013
Xysticus kali Tikader & Biswas, 1974	Banaskantha, Mehsana, Sabarkantha	Parmar, 2020, 2021
<i>Xysticus roonwali</i> Tikader, 1964	Junagadh	Chatrabhuj, 2007
39.Titanoecidae		
Pandava andhraca (Patel & Reddy, 1990)	Junagadh	Parikh <i>et al.</i> , 2008
Pandava laminata (Thorell, 1878)	Panchmahal	Solanki, 2015; Solanki et al., 2017
Pandava nathabhaii (Patel & Patel, 1975)	Amreli, Anand, Banaskantha, Bhavnagar, Mehsana, Rajkot, Sabarkantha, Surendranagar	Patel & Patel, 1975b; Patel & Pillai, 1988; Sebastian, 1988
40. Uloboridae		
Miagrammopes indicus Tikader, 1971	Bhavnagar	Patel, 1985
Philoponella feroka (Bradoo, 1979)	Anand	Babu <i>et al.</i> , 2022
<i>Uloborus danolius</i> Tikader, 1969	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Junagadh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel, 1971, 1985; Sebastian, 1988; Patel & Vyas, 2001; Siliwal, 2000; Siliwal <i>et al.</i> , 2003a, b; Patel, 2002, 2003; Chatrabhuj, 2007; Patel <i>et al.</i> , 2012; Parasharya & Pathan, 2013; Bhatt, 2014; Solanki & Kumar, 2015; Parmar, 2018a, 2020; Yadav, 2019; Solanki <i>et al.</i> , 2020
<i>Uloborus khasiensis</i> Tikader, 1969	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha, Surendranagar	Patel, 1971, 1985; Sebastian, 1988; Dhulia & Yadav, 1991; Patel, 2002, 2003; Siliwal <i>et al.</i> , 2003b; Bhatt, 2014; Solanki & Kumar, 2015; Suthar <i>et al.</i> , 2017; Yadav <i>et al.</i> , 2017; Parmar, 2020
<i>Uloborus krishnae</i> Tikader, 1970	Dahod, Dang, Junagadh, Kachchh, Mehsana, Panchmahal, Navsari, Vadodara	Patel, 1971; Siliwal, 2000; Patel, 2002 2003; Chatrabhuj, 2007; Parmar & Patel, 2015; Parmar et al., 2015; Solanki, 2015; Yadav et al., 2017; Parmar, 2018a, 2021; Thumar, 2019; Solanki et al., 2020
Uloborus plumipes Lucas, 1846	Ahmedabad, Amreli, Anand, Bhavnagar, Dang, Kachchh, Mehsana, Navsari, Panchmahal, Patan	Patel, 1985; Mehta, 2001; Parmar, 2013, 2021; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Yadav, 2019; Dal & Trivedi, 2020; Parmar <i>et al.</i> , 2023
Zosis geniculata (Olivier, 1789)	Navsari, Panchmahal	Solanki, 2015; Thumar, 2019; Yadav, 2019; Solanki <i>et al.</i> , 2020

Family/Species	Distribution in districts	References
41. Zodariidae		
Laminion birenifer (Gravely, 1921)	Junagadh	Chatrabhuj, 2007
Laminion gujaratense (Tikader & Patel, 1975)	Anand, Kheda, Panchmahal	Tikader & Patel, 1975; Solanki, 2015; Solanki <i>et al.</i> , 2018; Yadav, 2019; Solanki <i>et al.</i> , 2020
Mallinella indica (Tikader & Patel, 1975)	Anand, Bhavnagar, Mehsana, Panchmahal, Sabarkantha, Surendranagar	Tikader & Patel, 1975; Patel & Pillai, 1988; Sebastian, 1988; Parmar, 2013
Storenomorpha raghavai (Patel & Reddy, 1991)	Junagadh	Parikh <i>et al.</i> , 2008
Tropizodium kalami Prajapati, Murthappa, Sankaran & Sebastian, 2016	Panchmahal	Yadav, 2019
Tropizodium viridurbium Prajapati, Murthappa, Sankaran & Sebastian, 2016	Gandhinagar, Panchmahal	Prajapati et al., 2016a; Yadav, 2019
Zodarion deccanense (Tikader & Malhotra, 1976)	Bhavnagar	Patel, 1985

Table 2. List of species of spiders identified only up to generic level recorded from different districts of Gujarat.

Families/Species	Distribution in districts	Refernces
1. Agelenidae		
Agelena sp.	Anand, Dang, Junagadh, Mehsana	Siliwal <i>et al.</i> , 2003b; Parikh <i>et al.</i> , 2008; Parmar, 2013, 2018a; Parmar & Patel, 2015
2. Amaurobiidae		
Amaurobius sp.	Bhavnagar, Dang, Rajkot	Patel & Pillai, 1988; Siliwal <i>et al.</i> , 2003b
3. Araneidae		
Araneus sp.	Amreli, Kachchh, Mehsana, Panchmahal, Rajkot, Navsari	Patel, 2003; Trivedi, 2009; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2015; Yadav, 2019; Dal & Trivedi, 2020; Parmar, 2021
Argiope sp.	Ahmedabad, Anand, Kachchh, Kheda, Mehsana, Navsari	Parasharya & Pathan, 2013; Parmar, 2013; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2018; Chandra <i>et al.</i> , 2021
Chorizopes sp.	Anand, Banaskantha, Kheda, Mehsana, Panchmahal, Sabarkantha	Pradipkumar, 2009; Parasharya & Pathan, 2013; Solanki, 2015; Yadav <i>et al.</i> , 2017; Parmar, 2020; Yadav & Kumar, 2019
Cyclosa sp.	Ahmedabad, Amreli, Anand, Banaskantha, Dang, Kachchh, Mehsana, Navsari, Sabarkantha, Vadodara	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parasharya & Pathan, 2013; Solanki & Kumar, 2014; Prajapati <i>et al.</i> , 2016c; Parmar, 2018a, 2020; Dal & Trivedi, 2020
Cyrtarachne sp.	Navsari	Patel, 2003

Families/Species	Distribution in districts	Refernces
Cyrtophora sp.	Anand, Junagadh	Parikh <i>et al.</i> , 2008; Parasharya & Pathan, 2013
Eriophora sp.	Anand, Banaskantha, Kheda, Mehsana, Sabarkantha	Parmar, 2013, 2018a, 2020, 2021; Parmar & Acharya, 2015
Eriovixia sp.	Ahmedabad, Anand, Mehsana, Navsari	Parmar, 2013; Prajapati <i>et al.</i> , 2016c, 2018; Chandra <i>et al.</i> , 2021; Prajapati <i>et al.</i> , 2023
Gasteracantha sp.	Amreli, Dang	Siliwal <i>et al.</i> , 2003b; Suthar <i>et al.</i> , 2017; Dal & Trivedi, 2020
Gea sp.	Kachchh, Mehsana	Parmar et al., 2015, Prajapati et al., 2023
Guizygiella sp.	Ahmedabad, Anand, Dahod, Panchmahal, Vadodara	Patel <i>et al.</i> , 2012; Parmar, 2013; Solanki & Kumar, 2014; Yadav & Kumar, 2019; Chandra <i>et al.</i> , 2021
Larinia sp.	Banaskantha, Dang, Junagadh, Mehsana, Navsari, Sabarkantha,	Siliwal <i>et al.</i> , 2003b; Parikh <i>et al.</i> , 2008; Parmar, 2018a, 2020; Prajapati <i>et al.</i> , 2018; Thumar, 2019; Prajapati <i>et al.</i> , 2023
Lipocrea sp.	Gujarat	Yadav et al., 2017
Neoscona sp.	Amreli, Anand, Banaskantha, Kachchh, Kheda, Mehsana, Navsari,	Patel, 2003; Trivedi, 2009; Parasharya & Pathan, 2013; Solanki & Kumar, 2014;
	Rajkot, Sabarkantha, Vadodara	Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Parmar, 2018a, 2020, 2021; Dal & Trivedi, 2020
Parawixia sp.	Vadodara	Solanki & Kumar, 2014
Pasilobus sp.	Navsari	Prajapati et al., 2018
Poltys sp.	Anand, Banaskantha, Dang, Kachchh, Mehsana, Navsari, Sabarkantha,	Siliwal <i>et al.</i> , 2003b; Parmar <i>et al.</i> , 2015; Parmar, 2018a, 2020, 2021; Thumar, 2019
Singa sp.	Banaskantha, Mehsana, Panchmahal, Sabarkantha,	Solanki, 2015; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020
4. Atypidae		
Atypus sp.	Junagadh	Parikh <i>et al.</i> , 2008
5. Cheiracanthiidae		
Cheiracanthium sp.	Ahmedabad, Anand, Banaskantha, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Pradipkumar, 2009; Trivedi, 2009; Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Parmar, 2020, 2021; Solanki <i>et al.</i> , 2020
6. Clubionidae		
Clubiona sp.	Ahmedabad, Anand, Banaskantha, Junagadh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Parikh <i>et al.</i> , 2008; Trivedi, 2009; Parasharya & Pathan, 2013; Parmar, 2013, 2018a, 2020; Solanki & Kumar, 2015; Prajapati <i>et al.</i> , 2016c, 2018; Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019
7. Corinnidae		
Castianeira sp.	Ahmedabad, Anand, Banaskantha, Kheda, Mehsana, Navsari,	Majumder & Tikader, 1991; Siliwal, 2000; Siliwal <i>et al.</i> , 2003b; Parasharya

Families/Species	Distribution in districts	Refernces
	Panchmahal, Sabarkantha, Vadodara	& Pathan, 2013; Bhatt, 2014; Parmar & Acharya, 2015; Prajapati <i>et al.</i> , 2016c; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Thumar, 2019; Yadav, 2019; Yadav & Kumar, 2019
8. Ctenidae		
Ctenus sp.	Anand, Banaskantha, Junagadh, Kachchh, Mehsana, Sabarkantha,	Parikh <i>et al.</i> , 2008; Parmar, 2013, 2018a, 2020; Parmar <i>et al.</i> , 2015
9. Dictynidae		
Dictyna sp.	Rajkot	Patel & Vyas, 2001
Nigma sp.	Ahmedabad	Prajapati et al., 2016c
10. Eresidae		
Stegodyphus sp.	Anand	Parmar, 2013; Yadav et al., 2017
11. Filistatidae		
Filistata sp.	Dahod, Dang, Mehsana, Navsari	Patel, 2002, 2003; Siliwal <i>et al.</i> , 2003b; Parmar & Patel, 2015; Parmar, 2018a; Thumar, 2019
Pritha sp.	Kachchh, Mehsana, Navsari	Parmar <i>et al.</i> , 2015; Parmar, 2018a; Thumar, 2019
Sahastata sp.	Anand, Mehsana	Parmar, 2013; Prajapati et al., 2023
12. Gnaphosidae		
Callilepis sp.	Dang, Panchmahal	Siliwal et al., 2003b; Yadav, 2019
Camillina sp.	Gujarat	Yadav et al., 2017
Drassodes sp.	Anand, Banaskantha, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parmar, 2013, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Solanki <i>et al.</i> , 2020
Drassyllus sp.	Junagadh	Trivedi, 2016; Yadav et al., 2017
Eilica sp.	Kachchh,	Parmar et al., 2015
Gnaphosa sp.	Anand, Rajkot	Patel & Vyas, 2001; Parasharya & Pathan, 2013; Parmar, 2013
Haplodrassus sp.	Mehsana, Panchmahal	Solanki & Kumar, 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Parmar, 2018a; Solanki <i>et al.</i> , 2020
Herpyllus sp.	Navsari	Patel, 2003
Megamyrmaekion sp.	Junagadh	Parikh <i>et al.</i> , 2008
Melicymnis sp.	Gujarat	Yadav <i>et al.</i> , 2017
Micara sp.	Anand, Navsari, Sabarkantha	Sebastian, 1988; Patel, 2003; Parasharya & Pathan, 2013
Nomisia sp.	Mehsana,	Parmar, 2018a
Poecilochroa sp.	Anand, Banaskantha, Mehsana, Navsari, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar & Patel, 2015; Thumar, 2019
Prodidomus sp.	Junagadh, Panchmahal	Parikh <i>et al.</i> , 2008; Solanki, 2015; Yadav, 2019; Solanki <i>et al.</i> , 2020
Scopoides sp.	Dang, Panchmahal	Siliwal et al., 2003b; Solanki & Kumar,

Families/Species	Distribution in districts	Refernces
		2015; Solanki, 2015; Solanki et al., 2020
Scotophaeus sp.	Anand, Mehsana, Navsari, Sabarkantha	Sebastian, 1988; Parasharya & Pathan, 2013; Thumar, 2019; Prajapati <i>et al.</i> , 2023
Trachyzelotes sp.	Mehsana	Parmar & Patel, 2015
Zelotes sp.	Anand, Banaskantha, Kachchh, Mehsana, Navsari, Sabarkantha, Surendranagar	Sebastian, 1988; Siliwal <i>et al.</i> , 2003b; Parmar, 2013, 2018a, 2020; Parmar <i>et al.</i> , 2015; Thumar, 2019
13. Halonoproctidae		
Latouchia sp.	Junagadh	Parikh <i>et al.</i> , 2008
14. Hersiliidae		
Hersilia sp.	Ahmedabad, Amreli, Banaskantha, Kachchh, Kheda, Mehsana, Navsari, Sabarkantha	Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Parmar, 2018a, 2020; Thumar, 2019; Dal & Trivedi, 2020
15. Idiopidae		
<i>Idiops</i> sp.	Gujarat	Yadav et al., 2017
16. Linyphiidae		
Erigone sp.	Gujarat	Yadav et al., 2017
Lepthyphantes sp.	Panchmahal	Yadav, 2019
Linyphia sp.	Kachchh, Mehsana, Navsari, Panchmahal	Parmar <i>et al.</i> , 2015; Parmar, 2018a; Thumar, 2019; Yadav, 2019
17. Liocranidae		
Oedignatha sp.	Panchmahal	Solanki, 2015; Yadav <i>et al.</i> , 2017; Yadav, 2019; Solanki <i>et al.</i> , 2020
18. Lycosidae		
Arctosa sp.	Kachchh, Mehsana,	Parmar <i>et al.</i> , 2015; Parmar & Patel, 2015
Evippa sp.	Anand, Dang, Junagadh, Kachchh, Navsari, Panchmahal, Rajkot	Patel, 2003; Siliwal <i>et al.</i> , 2003a, b; Parikh <i>et al.</i> , 2008; Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015; Solanki, 2015; Yadav <i>et al.</i> , 2017; Solanki <i>et al.</i> , 2020
Hippasa sp.	Anand, Dahod, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Vadodara	Siliwal <i>et al.</i> , 2003a, b; Trivedi, 2009; Patel <i>et al.</i> , 2012; Parasharya & Pathan, 2013; Parmar, 2013; Solanki & Kumar, 2014, 2015; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Thumar, 2019; Prajapati <i>et al.</i> , 2023
<i>Lycosa</i> sp.	Ahmedabad, Amreli, Anand, Banaskantha, Bhavnagar, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Sebastian, 1988; Patel & Vyas, 2001; Siliwal <i>et al.</i> , 2003b; Parasharya & Pathan, 2013; Solanki & Kumar, 2014; Parmar & Acharya, 2015; Prajapati <i>et al.</i> , 2016c; Parmar <i>et al.</i> , 2015; Trivedi, 2009, 2016; Yadav <i>et al.</i> , 2017; Parmar, 2018a, 2020; Prajapati <i>et al.</i> , 2018; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020
Ocyale sp.	Navsari	Patel, 2003

Families/Species	Distribution in districts	Refernces
Pardosa sp.	Anand, Banaskantha, Bhavnagar, Dahod, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar	Patel & Pillai, 1988; Sebastian, 1988; Patel & Vyas, 2001; Patel, 2003; Siliwal et al., 2003b; Patel et al., 2012; Parasharya & Pathan, 2013; Parmar & Acharya, 2015; Parmar et al., 2015; Parmar, 2018a, 2020
Trochosa sp.	Ahmedabad	Chandra et al., 2021
19. Mimetidae		
Mimetus sp.	Navsari, Panchmahal	Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav, 2019
20. Oecobiidae		
Oecobius sp.	Ahmedabad, Amreli, Anand, Junagadh, Kachchh, Mehsana	Parikh <i>et al.</i> , 2008; Parmar, 2013; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Dal & Trivedi, 2020
Uroctea sp. 21. Oonopidae	Banaskantha, Mehsana, Sabarkantha,	Parmar, 2018a, 2020
Brignolia sp.	Panchmahal	Solanki, 2015; Yadav <i>et al.</i> , 2017; Yadav, 2019; Solanki <i>et al.</i> , 2020
Ischnothyreus sp.	Panchmahal	Yadav et al., 2017; Yadav, 2019
Opopaea sp.	Panchmahal	Yadav, 2019
Orchestina sp.	Panchmahal	Yadav <i>et al.</i> , 2017; Yadav & Kumar, 2019
Xestaspis sp.	Ahmedabad	Prajapati et al., 2016c
22. Oxyopidae		
Hamadruas sp.	Kachchh, Mehsana	Parmar & Patel, 2015; Yadav <i>et al.</i> , 2017; Parmar, 2018a
Hamataliwa sp.	Banaskantha, Mehsana Sabarkantha,	Yadav et al., 2017; Parmar, 2018a, 2020
Oxyopes sp.	Ahmedabad, Anand, Banaskantha, Dahod, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Vadodara	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Trivedi, 2009; Patel <i>et al.</i> , 2012; Parasharya & Pathan, 2013; Parmar & Acharya, 2015; Prajapati <i>et al.</i> , 2016c; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020
Peucetia sp.	Anand, Banaskantha, Dang, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha,	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parasharya & Pathan, 2013; Parmar, 2013, 2020; Parmar & Acharya, 2015; Yadav, 2019; Solanki <i>et al.</i> , 2020
23. Palpimanidae		
Palpimanus sp.	Junagadh, Panchmahal	Parikh et al., 2008; Yadav, 2019
24. Philodromidae		
Philodromus sp.	Banaskantha, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Trivedi, 2009; Parmar <i>et al.</i> , 2015; Parmar, 2018a, 2020; Thumar, 2019; Yadav & Kumar, 2019
Thanatus sp.	Amreli, Anand, Dang, Junagadh, Navsari	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parasharya & Pathan, 2013; Trivedi,

Families/Species	Distribution in districts	Refernces
		2016; Dal & Trivedi, 2020
Tibellus sp.	Anand, Banaskantha, Dang, Kachchh, Mehsana, Navsari, Rajkot, Sabarkantha, Vadodara	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Trivedi, 2009; Parmar, 2013, 2020; Solanki & Kumar, 2014; Parmar <i>et al.</i> , 2015
25. Pholcidae		
Artema sp.	Mehsana	Prajapati et al., 2023
Crossopriza sp.	Junagadh	Parikh <i>et al.</i> , 2008
Pholcus sp.	Ahmedabad, Anand, Banaskantha, Dang, Kachchh, Kheda, Mehsana, Panchmahal, Sabarkantha	Siliwal <i>et al.</i> , 2003b; Parmar, 2013, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Yadav & Kumar, 2019
26. Pisauridae		
Dendrolycosa sp.	Panchmahal	Yadav, 2019
Nilus sp.	Kachchh	Parmar et al., 2015
Perenethis sp.	Amreli, Banaskantha, Mehsana, Sabarkantha,	Parmar, 2018a, 2020; Dal & Trivedi, 2020
Pisaura sp.	Anand, Banaskantha, Dahod, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Patel & Vyas, 2001; Patel, 2003; Patel <i>et al.</i> , 2012; Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Yadav, 2019
Tinus sp.	Dang	Siliwal et al., 2003b
27. Psechridae		
Psechrus sp.	Junagadh	Parikh <i>et al.</i> , 2008
28. Salticidae		
Aelurillus sp.	Gujarat	Yadav et al., 2017
Bavia sp.	Kheda,	Parmar & Acharya, 2015
Bianor sp.	Ahmedabad, Panchmahal, Vadodara	Siliwal <i>et al.</i> , 2003b; Prajapati <i>et al.</i> , 2016c; Yadav, 2019
Brettus sp.	Gujarat	Yadav et al., 2017
Carrhotus sp.	Mehsana, Panchmahal	Parmar, 2018a; Yadav, 2019
Cosmophasis sp.	Navsari, Panchmahal	Prajapati et al., 2018; Yadav, 2019
Epeus sp.	Ahmedabad, Mehsana	Parmar & Patel, 2015; Prajapati et al., 2016c
Epocilla sp.	Kachchh, Panchmahal, Vadodara	Parmar <i>et al.</i> , 2015; Solanki, 2015; Solanki <i>et al.</i> , 2020
Evarcha sp.	Mehsana, Navsari	Prajapati et al., 2018; Prajapati et al., 2023
Harmochirus sp.	Anand, Panchmahal	Yadav, 2019; Raghunandan et al., 2021
Hyllus sp.	Anand, Navsari	Thumar, 2019; Raghunandan et al., 2021
Langona sp.	Ahmedabad, Amreli	Prajapati et al., 2016c; Dal & Trivedi, 2020
Lyssomanes sp.	Dang, Navsari	Patel, 2003; Siliwal et al., 2003b
Marengo sp.	Ahmedabad	Prajapati et al., 2016c
Marpissa sp.	Dang, Navsari, Panchmahal, Rajkot	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Trivedi, 2009; Solanki <i>et al.</i> , 2020

Families/Species	Distribution in districts	Refernces		
Menemerus sp.	Mehsana,	Parmar & Patel, 2015		
Myrmarachne sp.	Ahmedabad, Anand, Banaskantha, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha	Patel, 2003; Parasharya & Pathan, 2013 Parmar & Acharya, 2015; Prajapati <i>et al.</i> , 2016c; Parmar <i>et al.</i> , 2015; Parmar, 2018a; Solanki <i>et al.</i> , 2020		
Phidippus sp.	Anand, Banaskantha, Mehsana, Navsari, Rajkot, Sabarkantha	Patel & Vyas, 2001; Patel, 2003; Trivedi, 2009; Parasharya & Pathan, 2013; Parmar, 2020		
Phintella sp.	Ahmedabad, Banaskantha, Dang, Mehsana, Navsari, Panchmahal, Sabarkantha	Siliwal <i>et al.</i> , 2003b; Parmar & Patel, 2015; Prajapati <i>et al.</i> , 2016c; Thumar, 2019; Yadav & Kumar, 2019; Parmar, 2021		
Phintelloides sp.	Amreli, Mehsana	Dal & Trivedi, 2020; Prajapati <i>et al.</i> , 2023		
Phlegra sp.	Kachchh, Kheda, Mehsana,	Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Parmar & Patel, 2015		
Plexippus sp.	Anand, Kachchh,	Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015		
Portia sp.	Navsari, Panchmahal	Solanki, 2015; Thumar, 2019; Solanki <i>e al.</i> , 2020		
Pristobaeus sp.	Navsari	Prajapati et al., 2018		
Ptocasius sp.	Kheda, Mehsana, Navsari	Parmar & Acharya, 2015; Parmar, 2018a; Thumar, 2019		
Rhene sp.	Ahmedabad, Anand, Banaskantha, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Vadodara	Siliwal <i>et al.</i> , 2003b; Trivedi, 2009; Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2018; Yadav, 2019; Parmar, 2020; Chandra <i>et al.</i> , 2021		
Rudakius sp.	Mehsana	Prajapati et al., 2023		
Salticus sp.	Anand, Navsari	Patel, 2003; Parasharya & Pathan, 2013 Thumar, 2019		
Siler sp.	Mehsana, Navsari	Parmar & Patel, 2015; Parmar, 2018a; Prajapati <i>et al.</i> , 2018		
Stenaelurillus sp.	Banaskantha, Mehsana, Panchmahal, Sabarkantha	Solanki, 2015; Parmar, 2018a, 2020; Solanki <i>et al.</i> , 2020		
Telamonia sp.	Amreli, Anand, Kachchh, Kheda, Mehsana, Navsari, Rajkot	Trivedi, 2009; Parmar, 2013; Parmar & Acharya, 2015; Parmar & Patel, 2015; Parmar <i>et al.</i> , 2015; Thumar, 2019; Dal & Trivedi, 2020		
Thiania sp.	Banaskantha, Mehsana, Navsari, Sabarkantha	Parmar & Patel, 2015; Parmar, 2018a, 2020; Thumar, 2019		
Thyene sp.	Panchmahal	Yadav, 2019		
9. Scytodidae				
Dictis sp.	Navsari	Thumar, 2019		
Scytodes sp.	Ahmedabad, Amreli, Anand, Banaskantha, Dang, Mehsana, Panchmahal, Sabarkantha, Vadodara	Siliwal <i>et al.</i> , 2003a, b; Parasharya & Pathan, 2013; Prajapati <i>et al.</i> , 2016c; Solanki, 2015; Parmar, 2018a, 2020; Day		

Families/Species	Distribution in districts	Refernces
		& Trivedi, 2020; Solanki et al., 2020
30. Segestriidae		
Ariadna sp.	Panchmahal	Yadav, 2019
31. Selenopidae		
Selenops sp.	Banaskantha, Junagadh, Mehsana, Sabarkantha	Parikh <i>et al.</i> , 2008; Trivedi, 2016; Parmar, 2018a, 2020
32. Sicariidae		
Loxosceles sp.	Junagadh	Parikh et al., 2008
33. Sparassidae		
Heteropoda sp.	Ahmedabad, Anand, Banaskantha, Dang, Junagadh, Kachchh, Kheda, Mehsana, Panchmahal, Rajkot, Sabarkantha	Siliwal <i>et al.</i> , 2003b; Parikh <i>et al.</i> , 2008; Trivedi, 2009; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Trivedi, 2016; Yadav & Kumar, 2019
Olios sp.	Ahmedabad, Anand, Banaskantha, Dahod, Dang, Junagadh, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Patel & Vyas, 2001; Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parikh <i>et al.</i> , 2008; Patel <i>et al.</i> , 2012; Parmar, 2013, 2018a, 2020; Solanki & Kumar, 2015; Prajapati <i>et al.</i> , 2016c; Solanki <i>et al.</i> , 2020
Palystes sp.	Kheda	Pradipkumar, 2009
Thelcticopis sp.	Kachchh, Navsari	Parmar et al., 2015; Thumar, 2019
34. Stenochilidae		
Stenochilus sp.	Junagadh	Parikh et al., 2008
35. Tetrablemmidae		
Micromatta sp.	Mehsana	Prajapati et al., 2023
Tetrablemma sp.	Junagadh	Parikh et al., 2008
36. Tetragnathidae		
Leucage sp.	Amreli, Anand	Parasharya & Pathan, 2013; Dal & Trivedi, 2020; Raghunandan <i>et al.</i> , 2021
Tetragnatha sp.	Anand, Banaskantha, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha	Patel, 2003; Siliwal <i>et al.</i> , 2003b; Parikh <i>et al.</i> , 2008; Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Yadav & Kumar, 2019
Tylorida sp.	Anand, Kheda	Parmar, 2013; Parmar & Acharya, 2015
37. Theraphosidae		
Chilobrachys sp.	Dang, Navsari, Tapi	Pandey <i>et al.</i> , 2004; Parasharya <i>et al.</i> , 2011
Plesiophrictus sp.	Dang, Navsari, Panchmahal, Tapi	Patel, 2003; Pandey <i>et al.</i> , 2004; Parasharya <i>et al.</i> , 2011; Yadav, 2019
38. Theridiidae		
Achaearanea sp.	Anand, Banaskantha, Kheda, Mehsana, Navsari, Sabarkantha,	Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Thumar, 2019
Anelosimus sp.	Navsari	Thumar, 2019
Argyrodes sp.	Ahmedabad, Anand, Dahod, Kachchh, Kheda, Mehsana, Navsari,	Patel, 2002, 2003; Parasharya & Pathan, 2013; Parmar, 2013; Solanki & Kumar, 2015; Parmar & Acharya, 2015; Parmar

Families/Species	Distribution in districts	Refernces
	Panchmahal, Vadodara	<i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Parmar, 2018a
Cephalobares sp.	Panchmahal	Solanki et al., 2020
Chrysso sp.	Anand, Banaskantha, Kachchh, Kheda, Mehsana, Sabarkantha	Parmar, 2013, 2018a, 2020; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015
Coleosoma sp.	Navsari	Thumar, 2019
Cyllognatha sp.	Anand	Parasharya & Pathan, 2013
Euryopis sp.	Panchmahal	Solanki, 2015; Solanki et al., 2020
Faiditus sp.	Panchmahal	Yadav, 2019
Parasteatoda sp.	Navsari	Yadav et al., 2017; Thumar, 2019
Phoroncidia sp.	Navsari	Thumar, 2019
Rhomphaea sp.	Ahmedabad, Dahod, Navsari	Patel, 2002, 2003; Prajapati <i>et al.</i> , 2016c; Thumar, 2019
Steatoda sp.	Amreli, Anand, Banaskantha, Bhavnagar, Dang, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha	Patel & Pillai, 1988; Siliwal <i>et al.</i> , 2003b; Parmar, 2013, 2018a, 2020; Parmar <i>et al.</i> , 2015; Solanki, 2015; Prajapati <i>et al.</i> , 2018; Solanki <i>et al.</i> , 2020
Theridion sp.	Ahmedabad, Anand, Banaskantha, Dahod, Dang, Kachchh, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Surendranagar, Vadodara	Patel & Vyas, 2001; Patel, 2002, 2003 Siliwal <i>et al.</i> , 2003b; Trivedi, 2009; Parasharya & Pathan, 2013; Solanki & Kumar, 2014; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Yadav, 2019; Parmar, 2020, 2021
Thwaitesia sp.	Navsari, Panchmahal	Thumar, 2019; Yadav, 2019
39. Thomisidae		
Angaeus sp.	Navsari	Thumar, 2019
Camaricus sp.	Dahod, Navsari, Panchmahal	Patel, 2003; Patel <i>et al.</i> , 2012; Yadav, 2019; Solanki <i>et al.</i> , 2020
Diaea sp.	Banaskantha, Mehsana, Navsari, Sabarkantha	Patel, 2003; Parmar, 2018a, 2020; Thumar, 2019
Indoxysticus sp.	Ahmedabad	Prajapati et al., 2016c
Misumena sp.	Anand, Banaskantha, Kachchh, Mehsana, Panchmahal, Sabarkantha,	Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015; Parmar, 2018a, 2020; Yadav 2019
Misumenoides sp.	Anand, Panchmahal	Parasharya & Pathan, 2013; Yadav, 2019
Misumenops sp.	Navsari	Patel, 2003
Monaeses sp.	Anand	Parasharya & Pathan, 2013
Oxytate sp.	Ahmedabad, Banaskantha, Mehsana, Sabarkantha	Prajapati <i>et al.</i> , 2016c; Parmar, 2018a. 2020, 2021
Ozyptila sp.	Anand	Parasharya & Pathan, 2013
Runcinia sp.	Anand, Banaskantha, Junagadh, Kachchh, Mehsana, Panchmahal, Sabarkantha	Parmar, 2013, 2018a, 2020, 2021; Parmar <i>et al.</i> , 2015; Solanki, 2015; Trivedi, 2016; Solanki <i>et al.</i> , 2020
Strigoplus sp.	Navsari, Panchmahal	Patel, 2003; Yadav, 2019

Families/Species	Distribution in districts	Refernces		
Synema sp.	Navsari	Patel, 2003		
Thomisus sp.	Ahmedabad, Amreli, Anand, Banaskantha, Dahod, Dang, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Rajkot, Sabarkantha, Vadodara	Patel, 2003; Parikh <i>et al.</i> , 2008; Trivedi, 2009; Patel <i>et al.</i> , 2012; Parasharya & Pathan, 2013; Solanki & Kumar, 2015; Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020		
Tmarus sp.	Ahmedabad, Amreli, Navsari, Vadodara	Siliwal, 2000; Patel, 2003; Prajapati <i>et al.</i> , 2016c; Thumar, 2019; Dal & Trivedi, 2020		
Xysticus sp.	Anand, Kachchh, Mehsana, Navsari, Vadodara	Parmar, 2013, 2018a, 2021; Patel <i>et al.</i> , 2013; Solanki & Kumar, 2014; Parmar <i>et al.</i> , 2015		
40. Titanoecidae				
Pandava sp.	Panchmahal	Solanki et al., 2020		
41. Uloboridae				
Miagrammopes sp.	Mehsana, Navsari, Panchmahal	Solanki, 2015; Parmar, 2018a; Thumar, 2019; Solanki <i>et al.</i> , 2020		
Philoponella sp.	Navsari, Panchmahal	Yadav <i>et al.</i> , 2017; Thumar, 2019; Yadav, 2019		
Uloborus sp.	Ahmedabad, Amreli, Anand, Banaskantha, Dahod, Junagadh, Kachchh, Kheda, Mehsana, Navsari, Panchmahal, Sabarkantha, Vadodara	Parikh <i>et al.</i> , 2008; Parasharya & Pathan, 2013; Parmar & Acharya, 2015; Prajapati <i>et al.</i> , 2016c; Parmar, 2018a, 2020; Thumar, 2019; Dal & Trivedi, 2020; Solanki <i>et al.</i> , 2020		
Zosis sp.	Banaskantha, Kachchh, Mehsana, Sabarkantha	Parmar et al., 2015; Parmar, 2020		
42. Zodariidae				
Asceua sp.	Ahmedabad, Anand, Kachchh, Kheda, Mehsana, Panchmahal	Parmar, 2013, 2018a Parmar & Acharya, 2015; Parmar <i>et al.</i> , 2015; Prajapati <i>et al.</i> , 2016c; Yadav & Kumar, 2019		
Lutica sp.	Dang, Navsari,	Patel, 2003; Siliwal et al., 2003b		
Mallinella sp.	Banaskantha, Mehsana, Navsari, Sabarkantha,	Yadav <i>et al.</i> , 2017; Thumar, 2019; Parmar, 2020		
Storena sp.	Anand, Junagadh, Kachchh, Mehsana, Navsari, Panchmahal	Patel, 2003; Parikh <i>et al.</i> , 2008; Parasharya & Pathan, 2013; Parmar <i>et al.</i> , 2015; Solanki, 2015; Parmar, 2018a; Solanki <i>et al.</i> , 2020		

Table 3. List of species of spiders seemingly misidentified recorded from different districts of Gujarat.

Families/Species	Distribution in districts	References
1. Araneidae		
Allocyclosa bifurca (McCook, 1887)	Vadodara	Siliwal, 2000
Scoloderus sp.	Navsari	Patel, 2003

Families/Species	Distribution in districts	References
2. Cheiracanthiidae		
Cheiracanthium punctorium (Villers, 1789)	Navsari	Prajapati et al., 2018
3. Corinnidae		
Castianeira azteca Reiskind, 1969	Anand, Vadodara	Bhatt, 2014
4. Dictynidae		
Nigma walckenaeri (Roewer, 1951)	Navsari	Thumar, 2019
5. Gnaphosidae		
Zelotes scrutatus (O. Pickard-Cambridge 1872)	Sabarkantha, Surendranagar	Sebastian, 1988
6. Hersiliidae		
Hersilia deelemanae M. Baehr & B. Baehr, 1993	Navsari	Thumar, 2019
7. Linyphiidae		
Stemonyphantes sp.	Vadodara	Kumar & Shivakumar, 2004; Solanki & Kumar, 2014
8. Lycosidae		
Acantholycosa sp.	Mehsana	Parmar & Patel, 2017; Parmar, 2018a, 2021
Arctosa mulani (Dyal, 1935)	Bhavnagar	Patel, 1985
Lycosa grahami Fox, 1935	Vadodara	Siliwal, 2000; Kumar & Shivakumar, 2006
9. Oecobiidae		
Oecobius navus Blackwall, 1859	Navsari	Thumar, 2019
<i>Oecobius templi</i> O. Pickard-Cambridge, 1876	Patan	Parmar et al., 2023
10. Pholcidae		
Physocyclus globosus (Taczanowski, 1874)	Banaskantha, Mehsana, Sabarkantha	Parmar, 2020
11. Salticidae		
Anarrhotus sp.	Navsari	Thumar, 2019
Cosmophasis umbratica Simon, 1903	Navsari	Thumar, 2019
Evarcha flavocincta (C.L. Koch, 1846)	Navsari	Thumar, 2019
Hentzia sp.	Mehsana	Parmar & Patel, 2015
Langona aperta (Denis, 1958)	Amreli	Yadav <i>et al.</i> , 2017; Dal & Trivedi, 2020
Langona bhutanica Prószyński, 1978?	Gujarat	Yadav et al., 2017
Langona tigrina (Simon, 1885)	Patan	Parmar et al., 2023
Menemerus brachygnathus (Thorell, 1887)	Banaskantha, Mehsana, Sabarkantha	Parmar, 2018a, 2020; Parmar & Patel, 2018
Myrmapeni sp.	Panchmahal	Yadav, 2019
Myrmatheca alticephalon (Yamasaki & Ahmad, 2013)	Panchmahal	Yadav, 2019

Families/Species	Distribution in districts	References	
Phintella bifurcilinea (Bösenberg & Strand, 1906)	Navsari	Thumar, 2019	
Stenaelurillus nigricaudus Simon, 1886	Junagadh	Trivedi, 2016	
12. Sparassidae			
Heteropoda tetrica Thorell, 1897	Navsari	Thumar, 2019	
13. Tetragnathidae			
Tetragnatha moulmeinensis Gravely, 1921	Bhavnagar, Dang	Patel, 1985; Mehta, 2001	
14. Theridiidae			
Steatoda grossa (C.L. Koch, 1838)	Mehsana	Parmar, 2021	
15. Thomisidae			
Indoxysticus lumbricus Tang & Li, 2010	Panchmahal	Yadav, 2019	
Thomisus onustus Walckenaer, 1805	Mehsana, Patan	Parmar <i>et al.</i> , 2023; Prajapati <i>et al.</i> , 2023	

Table 4. Number of genera and species, species identified upto generic level, and seemingly misidentified species of spiders recorded in Gujarat state of India.

Districts		f identified ecies	Number of species identified up to genus	Number of seemingly misidentified species	
	Genera	Species	Genera	Genera	Species
1. Ahmedabad	50	69	34	-	-
2. Amreli	49	67	18	1	1
3. Anand	74	118	63	1	1
4. Aravalli	-	-	-	-	-
5. Banaskantha	81	127	49	2	2
6. Bharuch	3	3	-	-	-
7. Bhavnagar	112	206	4	2	2
8. Botad	_	_	-	-	-
9. Chhota Udaipur	-	-	-	-	-
10. Dahod	30	43	13	-	-
11. Dang	87	162	33	1	1
12. Devbhoomi Dwarka	_	_	-	-	-
13. Gandhinagar	4	4	-	-	-
14. Gir Somnath	-	-	- 0	-	-
15. Jamnagar	8	8	-	-	-
16. Junagadh	44	121	28	1	1
17. Kachchh	59	78	49	1	1
18. Kheda	53	77	30	-	-
19. Mahisagar	-	-	-	-	-
20. Mehsana	107	215	83	6	6
21. Morbi	_	-	_	-	-

22. Narmada	4	4	-	₩W.F [*] Servence	-
23. Navsari	89	167	81	10	10
24. Panchmahal	99	165	68	3	3
25. Patan	46	54	-	3	3
26. Porbandar	1	1	-	-	-
27. Rajkot	54	80	24	-	-
28. Sabarkantha	100	192	51	3	3
29. Surat	2	2	-	-	-
30. Surendranagar	56	108	4	1	1
31. Tapi	-	-	2	-	-
32. Vadodara	51	118	19	4	4
33. Valsad	11	13	-	-	-

Table 5. Distribution of valid species, species identified only up to generic level, and seemingly misidentified species in different districts of Gujarat.

Families	Nu	mber of species		species i	ber of dentified	Number of species seemingly misidentified		
	Genera	Species	Districts		genus Districts	Genera	species	District
Agelenidae	1	2	2	1	4	0	0	0
Amaurobiidae	0	0	0	1	3	0	0	0
Araneidae	24	79	23	18	15	2	2	2
Atypidae	0	0	0	1	1	0	0	0
Barychelidae	1	1	1	0	0	0	0	0
Cheiracanthiidae	1	11	17	1	11	1	1	1
Clubionidae	1	4	14	1	9	0	0	0
Corinnidae	2	6	16	1	9	1	1	2
Ctenidae	2	2	2	1	6	0	0	0
Deinopidae	1	1	2	0	0	0	0	0
Dictynidae	1	2	7	2	2	1	1	1
Eresidae	1	4	14	1	1	0	0	0
Filistatidae	3	6	14	3	6	0	0	0
Gnaphosidae	14	51	17	18	12	1	1	2
Hahniidae	2	2	2	0	0	1	1	1
Halonoproctidae	0	0	0	1	1	0	0	0
Hersiliidae	2	5	16	1	8	1	1	1
Idiopidae	1	3	1	1	1	0	0	0
Ischnothelidae	1	1	1	0	0	0	0	0
Linyphiidae	2	2	2	3	5	1	1	1
Liocranidae	2	6	12	1	1	0	0	0
Lycosidae	10	68	20	7	17	3	3	3
Mimetidae	0	0	0	1	2	0	0	0
Oecobiidae	2	4	13	2	8	1	2	2
Oonopidae	3	6	9	5	2	0	0	0
Oxyopidae	3	31	18	4	13	0	0	0
Palpimanidae	2	2	3	1	2	0	0	0
Philodromidae	3	12	12	3	12	0	0	0

Families	Number of valid species			Number of species identified up to genus		Number of species seemingly misidentified		
	Genera	Species	Districts	Genera	Districts	Genera	species	District
Pholcidae	4	5	16	3	10	1	1	3
Pisauridae	4	7	8	5	12	0	0	0
Prodidomidae	1	1	3	0	0	0	0	0
Psechridae	0	0	0	1	1	0	0	0
Salticidae	36	64	20	33	13	9	11	8
Scytodidae	1	6	18	2	10	0	0	0
Segestriidae	1	1	1	1	1	0	0	0
Selenopidae	1	1	5	1	4	0	0	0
Sicariidae	1	1	10	1	1	0	0	0
Sparassidae	5	19	18	4	13	1	1	1
Stenochilidae	1	1	1	1	1	0	0	0
Tetrablemmidae	0	0	0	2	2	0	0	0
Tetragnathidae	4	19	16	3	11	1	1	2
Theraphosidae	4	4	3	2	4	0	0	0
Theridiidae	16	35	21	15	16	1	1	1
Thomisidae	16	41	18	16	15	1	2	3
Titanoecidae	1	3	10	1	1	0	0	0
Uloboridae	4	7	18	4	13	0	0	0
Zodariidae	5	7	9	4	11	0	0	0
Total	190	533	25	178	17	27	31	13

References

Babu, N., Caleb, J.T., Jani, M., Uma, D. & Prasad, G. 2022. On the taxonomy and distribution of the orb-weaving spider *Philoponella feroka* (Bradoo, 1979) n. comb. from India (Araneae, Uloboridae). *Zootaxa*, 5087(3): 497-500.

Bharat, N.P., Harshil, P., Ramesh, T., Shantilal, K.T. & Arun, H.D. 2014. First record of *Plesiophrictus millardi* Pocock, 1899 (Araneae: Theraphosidae) from Gujarat, India. *Research Journal of Animal, Veterinary and Fishery Sciences*, 2(5): 6-9.

Bhatt, D., Maheta, N.P. & Raina, A.D. 2022. First record of *Neoheterophrictus smithi* Mirza, Bhosale & Sanap, 2014 (Arachnida, Araneae, Theraphosidae) from Gujarat, India. *International Journal of Entomology Research*, 7(1): 46-48.

Bhatt, N. 2008. Study of biodiversity of order Araneae from Narmada District, Gujarat. *Research Digests*, 34 (4): 26-28.

Bhatt, N. 2014. A preliminary systematic study of spiders of major wetlands of Anand-Kheda districts, Gujarat, India. *International Research Journal of Biological Sciences*, 3(7): 71-73.

Caleb, J.T.D. & Sankaran, P.M. 2023. *Araneae of India*, version 2023, online at https://indianspiders.in, accessed on March 12, 2023.

Chandra, K., Bharti, D., Kumar, S., Raghunathan, C., Gupta, D., Alfred, J.R.B. & Chowdhury, B.R. 2021. *Faunal diversity in Ramsar Wetlands of India*, Zoological Survey of India, Kolkata, 292 pp.

Chatrabhuj, V.N. 2007. *Bio-diversity of some arachnida from Junagadh district*. Ph.D. thesis, Bhavnagar University, Bhavnagar, Gujarat, 253 pp.

Dal, P. & Trivedi, V. 2020. Diversity pattern of spiders (Araneae) from two selected sites of mango orchard, Amreli district, Gujarat, India. *Environment and Ecology*, 38(4): 783-791.

Dhulia, F.K. & Yadav, D.N. 1991. Occurrence of some predatory spiders on hybrid cotton in Anand (Gujarat). *Journal of Biological Control*, 5(1): 48-49.

Gajbe, U.A. 1983. A new *Pterotricha* spider from India (Araneae: Gnaphosidae). *Bulletin of the Zoological Survey of India*, 5: 95-97.

Gajbe, U.A. 1999. Studies on some spiders of the family Oxyopidae (Araneae: Arachnida) from India. *Records of the Zoological Survey of India*, 97(3): 31-79.

Gosai, C.M. & Tatmuiya, R.N. 2019. Diversity of predatory spiders in cotton crop with relation to biological control of insect pests in Jamnagar district. *Review of Research*, 8(7): 1-6.

Kulkarni, S. & Yadav, S. 2015. Bridging the distributional gap of *Tylorida striata* (Thorell, 1877) and new synonymy (Araneae: Tetragnathidae). *Biodiversity Data Journal*, 3(e4878): 1-12.

Kulkarni, S., Vartak, A., Deshpande, V. & Halali, D. 2017. The spiny theridiid genus *Meotipa* Simon, 1895 in India, with description of a strange new species with translucent abdomen and a phylogenetic analysis about the genus placement (Araneae, The ridiidae). *Zootaxa*, 4291(3): 504-520.

Kumar, D. & Shivakumar, M.S. 2004. Ecological studies on spiders in rice agroecosystem of Vadodara (Gujarat) with special emphasis on biocontrol aspect. *Indian Journal of Entomology*, 66(4): 323-327.

Kumar, D. & Shivakumar, M.S. 2006. Seasonal abundance of spiders in pigeonpea agroecosystem. *Indian Journal of Environmental Sciences*, 10(1): 43-46.

Majumder, S.C. & Tikader, B.K. 1991. Studies on some spiders of the family Clubionidae from India. *Records of the Zoological Survey of India, Occasional Paper*, 102: 1-175.

Malamel, J.J., Prajapati, D.A., Sudhikumar, A.V. & Sebastian, P.A. 2019. Two new species of the tribe Ballini Banks, 1892 from India (Araneae: Salticidae). *Arthropoda Selecta*, 28(3): 424-434.

Mehta, Y.D. 2001. Biodiversity in the order Araneae of Dang forest. Ph. D. thesis, Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar, Gujarat, 158 pp.

Murthappa, P.S., Prajapati, D.A., Sankaran, P.M. & Sebastian, P.A. 2016. First records of the genus *Cambalida* Simon, 1909 (Araneae: Corinnidae Castianeirinae) from Asia with the description of two new species from India and one new combination. *Zootaxa*, 4103(6): 526-536.

Pandey, C.N., Patel, S.P., Chachin S. Chavan, Salvi, H.H., Patel, B.H., Vyas, R.R., Trivedi, P.P., Jethva, B. & Ambika A. 2004. The status of biodiversity in Purna Wildlife Sanctuary (a comprehensive ecological and socio-economic study). Gujarat Ecological Education and Research (GEER) Foundation, Gandhinagar and Forest Department, Government of Gujarat, August 2004, 150 pp.

Parasharya, B.M. & Pathan, V.A. 2013. Diversity of spider fauna in lucerne (*Medicago sativa L.*). *Journal of Biological Control*, 27(4): 253-259.

Parasharya, B.M., Vyas, R.V. & Patel, B.H. 2011. First authentic record of Regal Parachute Spider *Poecilotheria regalis* Pocock, 1899 and further comments in the distribution of Theraphosidae spiders from Gujarat State, India. *Journal of the British Tarantula society*, 26(2): 55-62.

Parasharya, B.M., Vyas, R.V., Rathod, D.M. & Mistry, V.M. (2018). Additional records of red-backed spider, Latrodectus hasselti Thorell (Araneae: Theridiidae) in Gujarat state, Western India. *Journal of Biological Control*, 32(2): 142-144.

Parikh, P.H., Sonavane, S. & Ahir, K. 2008. Spider diversity of Gir PA, Gujarat. *Journal of Current Science*, 12(2): 717-722.

Parmar, B.M. 2013. The spider diversity from different habitats around Biosciences, Vallabh Vidyanagar. *International Journal of Science and Research*, 4(10): 1985-1988.

Parmar, B.M. 2018a. Preliminary study of spiders (Order: Araneae) from Satlasana taluka. *International Journal of Pharmacy and Biological Sciences*, 8(3): 735-740.

Parmar, B.M. 2018b. Some spiders of Family Araneidae from Mahesana district. *International Journal of Scientific Research and Review*, 7(7): 643-646.

Parmar, B.M. 2020. The diversity of spiders from the vicinity of Dharoi Reservoir, North Gujarat, India. *Serket*, 17(3): 194-200.

Parmar, B.M. 2021. Spider fauna of some wetlands of Visnagar (Gujarat, India). Serket, 17(4): 400-405.

Parmar, B.M. & Acharya, A.V.R.L.N. 2015. The spider fauna of Pariej wetland, Gujarat, India. *International Journal of Science and Research*, 4(10): 1028-1033.

Parmar, B.M. & Patel, K.B. 2015. Study of spider diversity from Vadnagar Taluka, Gujarat. *Life science leaflets*, 64: 94-101.

Parmar, B.M. & Patel, K.B. 2017. Preliminary study of spiders (Order: Araneae) from Taranga Hills. *International Journal of Science and Research*, 6(11): 23-25.

- Parmar, B.M. & Patel K.B. 2018. Jumping spiders (Araneae: Salticidae) of Satlasana taluka. *International Journal of Advanced Engineering Research and Science*, 5(3): 159-162.
- Parmar, B.M., Patel, K.B., Joshi, J.D. & Chaudhari, N.R. 2015. Faunastic study of spiders diversity from islands and costal areas of gulf of Kutch, India. *Life Sciences Leaflets*, 67: 12-23.
- Parmar, B.N., Patel, H., Thumar, R., Tank, S.K. & Dholakia, A.H. 2014. First record of *Plesiophrictus millardi* Pocock, 1899 (Araneae: Theraphosidae) from Gujarat, India. *Research Journal of Animal, Veterinary and Fishery Science*, 2(5): 6-9.
- Parmar, S., Patel, K., Prajapati, D., Patel, H. & Trivedi, J. 2023. A preliminary checklist of spiders of Hemchandracharya North Gujarat University Campus, Patan, Gujarat, India. *Munis Entomology & Zoology*, 18 (1): 590-599.
- Patel, B.H. 1971. Studies on some spiders (Araneae: Arachnida) from Gujarat, India. Ph.D. thesis Submitted to Sardar Patel University, Vallabh Vidyanaga, Anand, Gujarat.
- Patel, B.H. 1973. Some interesting theridiid spiders (Araneae: Theridiidae) from Gujarat, India. *Bulletin of the British Arachnological Society*, 2: 149-152.
- Patel, B.H. 1975a. Two new spiders of the genus *Larinia* (Araneae: Argiopidae) from India. *Oriental Insects*, 9: 111-116.
- Patel, B.H. 1975b. Studies on some spiders of the family Argiopidae (Arachnida: Araneae) from Gujarat, India. *Vidya, Journal of Gujarat University*, 18(1): 153-167.
- Patel, B.H. 1975c. Some spiders of the families Filistatidae and Scytodidae from Gujarat, India. *Oriental Insects*, 9: 425-429.
- Patel, B.H. 1978a. A new species of spider of the family Oxyopidae from Gujarat, India, with notes on other species of the family. *Journal of the Bombay Natural History Society*, 74: 327-330.
- Patel, B.H. 1978b. Studies on Indian filistatid spiders (Araneae: Arachnida). *Journal of the Bombay Natural History Society*, 75: 183-189.
- Patel, B.H. 1987. Final Report of ICAR Research Scheme on Taxonomy, Biology, Ecology of spiders of Saurashtra and North Gujarat Regions. Department of Zoology, Sir P. P. Institute of Science, Bhavnagar University, Bhavnagar, Gujarat.
- Patel, B.H. 1999. Arachnida Spiders, pp. 53-55. In: Singh HS. (Ed). *Biodiversity study on Hingolgadh Nature Education Sanctuary, Rajkot District, Gujarat State*. Gujarat Ecological Education and Research Foundation, Gandhinagar, Gujarat.
- Patel, B.H. 2002. Invertebrates: Spiders. In: *Biodiversity study in Ratanmahals Wildlife Sanctuary*. (Eds. Singh, H.S., Patel, B.H., Trivedi, P., Raval, D.R., Pawar, J.S., Vyas, R.V. & Patel, B.H.), Gujarat Ecological Education and Research Foundation, Gandhinagar, Gujarat. pp. 81-83, 193-196.
- Patel, B.H. 2003. Fauna of protected areas in India I: Spiders of Vansda National Park, Gujarat. *Zoos' Print Journal*, 18(4): 1079-1083.
- Patel, B.H. & Patel, H.K. 1972. New species of *Cyllognatha* Koch and *Thwaitesia* Cambridge (Theridiidae: Araneida) from Gujarat, India. *Oriental Insects*, 6: 293-297.
- Patel, B.H. & Patel, H.K. 1973a. Descriptions of some new species of spiders from India. *Oriental Insects*, 7(1): 127-132.
- Patel, B.H. & Patel, H.K. 1973b. On some new species of spiders of family Clubionidae (Araneae: Arachnida) with a record of genus *Castianeira* Keyserling from Gujarat, India. *Proceedings of the Indian Academy of Science*, 78(B): 1-9.
- Patel, B.H. & Patel, H.K. 1975a. On some new species of spiders of family Gnaphosidae (Araneae: Arachnida) from Gujarat, India. *Records of the Zoological Survey of India*, 68: 33-39.
- Patel, B.H. & Patel, H.K. 1975b. A new record of the family Amaurobiidae (Arachnida: Araneae) from India. *Journal of the Bombay Natural History Society*, 72: 800-803.
- Patel, B.H. & Pillai, G.K. 1988. Studies on the spider fauna of groundnut fields in Gujarat, India. *Journal of Biological Control*, 2(2): 83-88.
- Patel, B.H. & Reddy, T.S. 1990. An addition to the araneid fauna (Araneae: Arachnida) of India. *Records of the Zoological Survey of India* 87: 157-164.
- Patel, B.H. & Vyas, R. 2001. Spiders of Hingolgadh Nature Education Sanctuary, Gujarat, India. Zoos' Print Journal, 16(9): 589-590.
- Patel, M.B. & Patel, M.I. 2015. Taxonomic status of spiders in Mehsana District North Gujarat, India. *Research Journal of Recent Sciences*, 4: 30-35.

Patel, M.L., Patel, K.G. & Jethva, D.M. 2013. Studies on the spider fauna of rice ecosystem in Gujarat. *AGRES – An International e-Journal*, 2(4): 434-446.

Patel, S.B., Bhatt, N.B. & Patel, K.B. 2012. Diversity of spider fauna of Ratanmahal sloth Bear Sanctuary, Gujarat. *Life science leaflets*, 7:74-79.

Patel, S.K. 1985. Faunastic survey of spiders from Bhavnagar district, Gujarat State. Ph.D. thesis, Bhavnagar University, Bhavnagar, Gujarat, 397 pp.

Patel, S.K. 1987a. A new spider species: *Pisaura swamii* sp. nov. (Pisauridae). *Biological Bulletin of India*, 9: 64-66.

Patel, S.K. 1987b. A new species of spider of the genus: *Uroctea* (Urocteidae) from India. *Biological Bulletin of India*, 9: 193-195.

Patel, S.K. 1988a. A new species of spider (family: Araneidae) from Gujarat, India. *Current Science*, 57: 1029-1030.

Patel, S.K. 1988b. A new spider species from Gujarat, India. Current Science, 57: 1192-1193.

Patel, S.K. 1988c. A new spider species of the genus *Eilica* (Gnaphosidae) from India. *Biological Bulletin of India*, 10: 41-43.

Patel, S.K. 1988d. A new species of spider of the genus: *Sergiolus* (Gnaphosidae) from India. *Biological Bulletin of India*, 10: 44-46.

Patel, S.K. 1989. A new species of the spider, genus *Poecilochroa* (Gnaphosidae) from India. *Current Science*, 58: 328-329.

Pillai, G.K. 1988. Taxonomy and biology of some predaceous spiders from major agricultural crops of Saurashtra region, Gujarat. Ph.D. thesis, Bhavnagar University, Bhavnagar, Gujarat, 232 pp.

Pillai, K.G. 2006. Hitherto unknown palpimanid spider (Araneae: Palpimanidae) from India. *Entomon*, 31: 133-136.

Pocock, R.I. 1899. Diagnoses of some new Indian Arachnida. *Journal of the Bombay Natural History Society*, 12: 744-753.

Pocock, R.I. 1900. *The Fauna of British India including Ceylon and Burma Arachnida*. Taylor and Francis London, London, 279 pp.

Pradipkumar, D.M. 2009. Studies on predatory spiders in rice ecosystem in middle Gujarat condition. *Proceedings of Environmental Science*, pp. 1-25.

Prajapati, D.A. 2019. A new species of the jumping spider genus *Phlegra* Simon, 1876 from India (Aranei: Salticidae: Aelurillina). *Arthropoda Selecta*, 28(4): 575-578.

Prajapati, D.A. 2021. Additional distribution records of *Zimiris doriae* Simon, 1882 (Araneae: Gnaphosidae) from India. *Journal of Threatened Taxa*, 13(6): 18667-18670.

Prajapati, D.A. & Dudhatra, A.V. 2022. First record of the spider genus *Tanzania* Koçak & Kemal, 2008 from Asia, with the description of a new species (Araneae: Salticidae). *Revue Suisse de Zoologie*, 129(2): 369-374.

Prajapati, D.A. & Kamboj, R.D. 2020a. Additional morphological notes on the male of *Icius alboterminus* (Caleb, 2014) (Aranei: Salticidae) with new distribution records from India. *Journal of Threatened Taxa*, 12(4): 15475-15480.

Prajapati, D.A. & Kamboj, R.D. 2020b. First description of the female of *Phintelloides undulatus* (Caleb & Karthikeyani, 2015) (Araneae: Salticidae: Chrysillini). *Arachnology*, 18(6): 602-606.

Prajapati, D.A., Hun, N.K. & Raval, J.V. 2021a. A new species and a new combination in *Palpimanus* Dufour, 1820 from India (Aranei: Palpimanidae). *Arthropoda Selecta*, 30(4): 541-545.

Prajapati, D.A., Tatu, K. & Kamboj, R.D. 2021b. First record of *Afraflacilla* Berland & Millot, 1941 from India, with description of a new species (Araneae: Salticidae). *Arachnology*, 18(9): 990-992.

Prajapati, D.A., Tatu, K. & Kamboj, R.D. 2021c. Redescription and junior synonyms of *Plexippus clemens* (O. Pickard-Cambridge, 1872) (Araneae: Salticidae). *Arachnology*, 18(8): 809-811.

Prajapati, D.A., Murthappa, P.S., Sankaran, P.M. & Sebastian, P.A. 2016a. Two new species of the anteating spider genus *Tropizodium* Jocqué & Churchill, 2005 (Araneae, Zodariidae, Zodariinae) from India. *Zootaxa*, 4061(5): 575-584.

Prajapati, D.A., Murthappa, P.S., Sankaran, P.M. & Sebastian, P.A. 2016b. Two new species of *Stenaelurillus* Simon, 1886 from India (Araneae: Salticidae: Aelurillina). *Zootaxa*, 4171(2): 321-334.

Prajapati, D.A., Patel, K.R., Munjpara, S.B., Chettiar, S.S. & Jhala, D.D. 2016c. Spiders (Arachnida: Araneae) of Gujarat University Campus, Ahmedabad, India with additional description of *Eilica tikaderi* (Platnick, 1976). *Journal of Threatened Taxa*, 8(11): 9327-9333.

Prajapati, J.N., Patel, S.R. & Surani P.M. 2018. Pictorial checklist of agrobiont spiders of Navsari Agricultural University, Navsari, Gujarat, India. *International Journal of Current Microbiology and Applied Sciences*, 7(7): 409-420.

Prajapati, N., Chaudhary, S. & Desai, P. 2023. A preliminary checklist of spiders of M.N. College, Visnagar (Gujarat), India. *Munis Entomology & Zoology*, 18(1): 474-480.

Raghunandan, B.L., Patel, N.M. & Patel, N.B. 2021. Diversity of spiders in paddy ecosystem of middle Gujarat. *Biological Forum – An International Journal*, 13(4): 1141-1144.

Ramanujam, B., Varshney, R., Kumar, M.S., Udayakumar, A., Patil, J., Selvaraj, K., Joshi, S. & Ballal, C.R. 2019. Biological Control of Crop Pests, Annual Progress Report. All India Co-ordinated Research Project on 2018-19. Director, National Bureau of Agricultural Insect Resources, Bengaluru, pp. 301.

Reddy, T.S. & Patel, B.H. 1993. Two new species of the genus *Chorizopes* O.P.Cambridge (Araneae: Araneidae) from India. *Entomon*, 18: 53-56.

Reddy, T.S. & Patel, B.H. 1994. A new species of genus *Ctenus* Walckenaer (Araneae: Ctenidae) from India. *Entomon*, 19: 131-133.

Sanap, R.V., Joglekar, A., Prajapati, D.A. & Caleb, J.T.D. 2017. Two new species of *Langelurillus* Próchniewicz, 1994 from India (Araneae: Salticidae: Aelurillina). *Zootaxa*, 4318(1): 135-146.

Sebastian, P.A. 1988. Studies on the biology of some predaceous spiders on insect pests of some major crops of north Gujarat. Ph.D. thesis, Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar, Gujarat, India, pp. 242.

Seppälä, S., Henriques, S., Draney, M., Foord, S., Gibbons, A., Gomez, L., Kariko, S., Malumbres-Olarte, J., Milne, M., Vink, C. & Cardoso, P. 2018. Species conservation profiles of a random sample of world spiders I: Agelenidae to Filistatidae. *Biodiversity Data Journal*, 6: e23555.

Sethi, V.D. & Tikader, B.K. 1988. Studies on some giant crab spiders of the family Heteropodidae from India. *Records of the Zoological Survey of India, Miscellaneous Publications, Occasional Paper*, 93: 1-94.

Sherriffs, W.R. 1919. A contribution to the study of south Indian arachnology. *Annals and Magazine of Natural History*, (9)4: 220-253.

Sherriffs, W.R. 1951. Some oriental spiders of the genus Oxyopes. Proceedings of the Zoological Society of London, 120: 651-677.

Siliwal, M. 2000. Taxonomic studies of spiders with special emphasis on their role in Biological control of insect pests. Ph.D. thesis Submitted to The M.S. University of Baroda, Vadodara, Gujarat, India, pp. 83.

Siliwal, M. & Kumar, D. 2001. Rare sighting of poisonous spider *Latrodectus hasseltii indicus* Simon (Araneae: Theridiidae) in a cotton field in Baroda district, Gujarat. *Current Science*, 81(9): 1170-1171.

Siliwal, M. & Kumar, D. 2002. Occurrence of spiders *Triaeris manii* and *Triaeris poonaensis*, Family Oonopidae, in a banana agroecosystem in Vadodara, Gujarat. *Journal of the Bombay Natural History Society*, 99(1): 352-355.

Siliwal, M. & Kumar, D. 2003a. Rare sighting of ogre-faced spider *Dinopis goalparaensis*, Araneae: Dinopidae, in the banana agro-ecosystem of Vadodara, Gujarat. *Journal of the Bombay Natural History Society*, 100(1): 160-161.

Siliwal, M. & Kumar, D. 2003b. Occurrence of rare jumping spider, *Harmochirus brachiatus* (Thorell) (Family: salticidae) in the banana agroecosystem of Baroda, Gujarat. *Journal Bombay Natural History Society*, 100(1): 157.

Siliwal, M., Suresh, B. & Pilo, B. 2002. Variations in the web of two related species of spiders *Gasteracantha unguifera* Simon and *Gasteracantha hasseltii* C.L. Koch. *Journal of the Bombay Natural History Society*, 99(1): 355-357.

Siliwal, M. & Suresh B. & Pilo, B. 2003a. Spiders of Purna Wildlife Sanctuary, Dangs, Gujarat. In. Fauna of protected areas-3. *Zoos' Print Journal*, 18(11): 1259-1263.

Siliwal, M., Suresh, B., Dhuru, S. & Pilo, B. 2003b. Spider diversity of riparian zone of river Vishwamitri, Gujarat. *Journal of Current Science*, 3(2): 429-434.

Siliwal, M., Yadav, A. & Kumar, D. 2017. Three new species of tube-dwelling spider genus *Ariadna* Audouin, 1826 (Araneae: Segestriidae) from India. *Zootaxa*, 4362(3): 433-441.

- Siliwal, M., Hippargi, R., Yadav, A. & Kumar, D. 2020. Five new species of trap-door spiders (Araneae: Mygalomorphae: Idiopidae) from India. *Journal of Threatened Taxa*, 12(13): 16775-16794.
- Simon, E. 1897. Matériaux pour servir à la faune arachnologique de l'Asie méridionale.V.Arachnides recueillis à Dehra-Dun (N.W.Prov.) et dans le Dekkan par M.A.Smythies. *Mémoires de la Société Zoologique de France*, 10: 252-262.
- Singh, H.S., Raval, B.R., Patel, B.H., Tatu, K., Patel, D., Vyas, R. & Patel, B.H. 2000. Biodiversity study on Vansda National Park. Gujarat Ecological Education & Research Foundation, Gandhinagar, 176 pp.
- Singh, R. 2022a. An updated checklist of spider (Araneae: Arachnida) fauna in different districts of Karnataka state, India. *Serket*, 18(4): 451-499.
- Singh, R. 2022b. An updated checklist of spider (Arachnida: Araneae) fauna of Maharashtra state, India. *International Journal on Biological Sciences*, 13(1): 14-74.
- Singh, R. 2022c. An updated checklist of spiders (Arachnida: Araneae) of Odisha state, India. *Arthropods*, 11(4): 186-214.
- Singh, R. & Sharma, A. 2022a. Diversity of spider fauna (Arachnida: Araneae) in different districts of Andhra Pradesh, India. *Serket*, 18(3): 356-377.
- Singh, R. & Sharma, A. 2022b. An updated checklist of spider (Araneomorphae: Araneae: Arachnida) diversity of Madhya Pradesh, India. *International Journal of Zoological Investigations*, 8(1): 191-218.
- Singh, R. & Sharma, A. 2022c. Diversity of spider (Araneae: Arachnida) fauna in different districts of Telangana State, India. *Munis Entomology & Zoology*, 17(2): 1375-1384.
- Singh, R. & Singh, G. 2021a. Faunal diversity of orb-weaver spiders (Araneidae: Araneomorphae: Araneae: Arachnida) in India. International *Journal of Biological and Environmental Investigations*, 1(2): 62-133.
- Singh, R. & Singh, G. 2021b. Faunal diversity of spiders (Chelicerata: Araneae) in Bihar and Jharkhand, India. *International Journal of Biological Innovations*, 3(2): 382-391.
- Singh, R. & Singh, B.B. 2021c. Checklist of spider diversity of Chhattisgarh (Araneomorphae: Araneae: Arachnida. *Journal of Applied Biosciences*, 47(1, 2): 52-61.
- Singh, R. & Singh, G. 2021d. Updated checklist of spider diversity (Arachnida: Araneae) in Haryana, Himachal Pradesh, Punjab, Chandigarh and Delhi (India). *Serket*, 18(2): 199-228.
- Singh, R. & Singh, G. 2021e. An updated checklist of spiders (Arachnida: Araneae) in Northeast India. *Serket*, 18(1): 91-144.
- Singh, R. & Singh, B.B. 2022a. An updated checklist of spiders (Arachnida: Araneae) of Goa, India. *International Journal of Biological Innovations*, 4(1): 51-63.
- Singh, R. & Singh, G. 2022b. An updated checklist of spiders (Arachnida: Araneae) of Rajasthan, India. *Journal of Animal Diversity*, 4(2): 76-90.
- Singh, R. & Singh, G. 2022c. Faunal diversity of spiders (Chelicerata: Araneae) in Uttar Pradesh and Uttarakhand, India. *Arthropods*, 11(1): 18-55.
- Singh, R. & Singh, G. 2022d. Updated checklist of spider diversity (Arachnida: Araneae) in three union territories of India: Andaman & Nicobar Islands, Puducherry and Lakshadweep Islands. *Munis Entomology & Zoology*, 17(2): 1050-1073.
- Singh, R., Khan, A.A., Mushtaq, T. & Khan, A.A. 2023. Updated checklist of spider diversity (Arachnida: Araneae) in two union territories of northwest India: Jammu and Kashmir and Ladakh. *International Journal of Zoological Investigations*, 9(1): 8-29.
- Solanki, R. 2015. Ecology and diversity of spider fauna in southern tropical dry deciduous forests of Gujarat. Ph.D. thesis, The M.S. University of Baroda, Vadodara Gujarat, India, 305 pp.
- Solanki, R. & Kumar, D. 2014. Effect of pesticides on spider population in cotton Agro-system of Vadodara (Gujarat). *The IIS University Journal of Science & Technology*, 3(1): 48-52.
- Solanki, R. & Kumar, D. 2015. Spiders (Araneae) from five major agroecosystems of Jambughoda village, Panchmahal district, Gujarat, India. *International Journal of Science and Research*, 4(9): 958-961.
- Solanki, R., Siliwal, M. & Kumar, D. 2017. First record of *Pandava laminata* (Thorell, 1878) (Araneae: Titanoecidae) from India. *European Journal of Zoological Research*, 5(1): 23-27.
- Solanki, R., Siliwal, M. & Kumar, D. 2018. Transfer of *Storena gujaratensis* Tikader & Patel, 1975 to the genus *Suffasia* Jocqué, 1991 (Araneae: Zodariidae). *Journal of Threatened Taxa*, 10(8): 12130-12132.

Solanki, R., Siliwal, M. & Kumar, D. 2020. A preliminary checklist of spiders (Araneae: Arachnida) in Jambughoda Wildlife Sanctuary, Panchmahal District, Gujarat, India. *Journal of Threatened Taxa*, 12(11): 16576-16596.

Sudhin, P.P., Nafin, K.S., Tripathi, R., Jangid, A.K., Prajapati, D.A., Siliwal, M. & Sudhikumar, A.V. 2022. Description of two new species of the genus *Afraflacilla* Berland et Millot, 1941 (Araneae: Salticidae) from India. *Arthropoda Selecta*, 31(3): 326-334.

Suthar, A.R., Rathod, J.Y. & Gavali, D.J. 2017. Rapid survey of spider diversity at Piplaidevi forest range, Dangs, Gujarat. *International Journal of Entomology Research*, 2(4): 12-15.

Thumar R.H. 2019. Biodiversity and taxonomic study of predactions spiders of some orchard plants in and around Navsari district, Gujarat. Ph.D. thesis, Veer Narmad South Gujarat University, Surat, Gujarat, 261 pp.

Thumar, R.H. & Dholakia, A.H. 2018. First record of *Chrysilla volupe* Karsch, 1879 (Araneae: Salticidae) in agroecosystem of Navsari at Gujarat, India. *Research Hub – International Multidisciplinary Research Journal*, 5(2, 10): 1-4.

Thumar, R.H., Dholakia, A.H. & Ade, P.P. 2016. Indian spiders of the genus *Ordgarius* (Araneae: Araneidae). *Global Journal for Research Analysis*, 5(9): 223-226.

Thumar, R.H., Dholakia, A.H. & Ade, P.P. 2021. First record of the genus *Angaeus* (Arachnida, Araneae, Thomisidae) from Gujarat-India. *Journal of Research and Development*, 11(24): 8-11.

Tikader, B.K. 1974. Studies on some jumping spiders of the genus *Phidippus* from India (family-Salticidae). *Proceedings of the Indian Academy of Science*, 79(B): 120-126.

Tikader, B.K. 1980. Fauna of India, Aranae, Vol.1, Part 1: Thomisidae (Crab-spiders), Zoological Survey of India, Kolkata, 247 pp.

Tikader, B.K. 1982. *The Fauna of India, Spiders: Araneae, Part 1 Family Araneidae (=Argiopidae)* Typical Orb-Weavers, Part 2 Family Gnaphosidae, Zoological Survey of India, Kolkata, 536 pp.

Tikader, B.K. & Bal, A. 1981. Studies on some orb-weaving spiders of the genera *Neoscona* Simon and *Araneus* Clerck of the family Araneidae (=Argiopidae) from India. *Records of the Zoological Survey of India, Occasional Paper*, 24: 1-60.

Tikader, B.K. & Malhotra, M.S. 1980. Fauna of India, Aranae, Vol.1, Part 2 Lycosidae (Wolf-spiders), Zoological Survey of India, Kolkata, pp. 248-447.

Tikader, B.K. & Patel, B.H. 1975. Studies on some rare spiders of the family Zodariidae from India. *Bulletin of the British Arachnological Society*, 3: 137-139.

Trivedi, V. 2009. Diversity of spiders in groundnut crop fields in village area of Saurashtra region. *Journal of the Bombay Natural History Society*, 106(2): 184-189.

Trivedi, V. 2016. Diversity of spiders in tur agro-ecosystem in relat ion to crop growth at Kathiawar, Gujarat. In: *Perspective on Biodiversity of India*. Volume II Part.1 Bijukumar, A Pradeep N S, Ajit Kumar K G and Rajendran P G., (Eds), Centre for Innovation in Science and Social Action, Thiruvananthapuram, India, pp. 477-481.

Trivedi, V. & Dal, P. 2019. Occurrence, distribution and description of *Loxosceles rufescens* (Dufour, 1820) (Araneae: Sicariidae) from Western India. *Journal of the Bombay Natural History Society*, 116: 1-8.

Uetz, G.W. 1992. Foraging strategies of spiders. *Trends in Ecology & Evolution*, 7(5): 155-159.

Vachhani, N.C., Visavadia, M.D. & Patel, S.K. 2012. A brief account of spiders of Junagadh district, Gujarat. *Life science leaflets*, 7:80-83.

Vasava, A.G., Patel, M., Parasharya, B.M., Mistry, V., Patel, P., Mehta, D., Patel, D. & Patel, K. 2015. Records of brown widow spider, *Latrodectus geometricus* Koch 1841, (Araneae: Theridiidae) from Gujarat, western India with notes on its distribution, habitat and natural history. *Acta Arachnologica*, 64(1): 5-9.

Vyas, R.V. & Parasharya, B.M. 2018. A preliminary but incomplete checklist of Gujarat spiders. *Journal of Threatened Taxa*, 10(3): 11493-11494.

World Spider Catalog 2023. *World Spider Catalog*. Version 24. Natural History Museum Bern, online at http://wsc.nmbe.ch, accessed on March 12, 2023.

Yadav, A. 2019. Diversity and ecology of spiders in Champaner-Pavagadh Archaeological Park, a world heritage site in Gujarat. Ph.D. thesis, The Maharaja Sayajirao University of Baroda, Vadodara, Maharashtra, India, 223 pp.

Yadav, A., & Kumar, D. 2019. Diversity and distribution of spider species in different habitats of Champaner-Pavagadh Archaeological Park, a world heritage site of Gujarat. *International Journal of Scientific Research and Reviews*, 8(2): 85-95.

Yadav, A., Solanki, R., Siliwal, M. & Kumar, D. 2017. Spiders of Gujarat: a preliminary checklist. *Journal of Threatened Taxa*, 9(9):10697-10716.

Spider (Araneae) fauna of İzmir Peninsula (Çeşme, Karaburun, Urla), Türkiye

Oğuz Tutar ¹ & Ersen Aydın Yağmur ^{2*}

¹ Tatvan Seydi Ali Reis Vocational and Technical Anatolian High School, Türkiye

² Alaşehir Vocational School, Manisa Celal Bayar University, TR-45600 Alaşehir, Manisa, Türkiye

* Corresponding author e-mail address: ersen.yagmur@gmail.com

Abstract

In this study, spider fauna of Çeşme, Karaburun and Urla districts in the İzmir Peninsula were investigated. Examined specimens were collected from various localities in the region between December 2016 and April 2018. As a result of the study, 497 adult spider specimens (299 \(\pi \), 198 \(\frac{1}{2} \)) were collected; 88 genera and 109 species belonging to 33 families were identified. Of these species, since five individuals belonging to different families are juvenile, their identification is left at the genus level. All species are new records for İzmir Peninsula except: Argyrodes argyrodes (Walckenaer, 1841), Dipoena galilaea Levy & Amitai, 1981, Dysdera fragaria Deeleman-Reinhold, 1988, Scytodes thoracica (Latreille, 1802), Scytodes velutina Heineken & Lowe, 1832, Tetragnatha nitens (Savigny, 1825) and Thanatus pictus L. Koch, 1881.

Keywords: Spider, Araneae, Fauna, Çeşme, Karaburun, Urla, İzmir, İzmir Peninsula.

Introduction

The İzmir Peninsula is located west of the İzmir province and comprises three districts which are Çeşme, Karaburun, and Urla districts (Fig. 1). The spider fauna of İzmir province and the İzmir Peninsula have been poorly investigated to this date. A total of 1251 spider species belonging to 55 families and 369 genera have been recorded from Türkiye up to now (Danışman *et al.*, 2023). Of these species *Scytodes velutina* Heineken & Lowe, 1832, *Scytodes thoracica* (Latreille, 1802), *Argyrodes argyrodes* (Walckenaer, 1841), *Philodromus lunatus* Muster & Thaler, 2004, *Pulchellodromus pulchellus* (Lucas, 1846), *Thanatus pictus* L. Koch, 1881 and *Thanatus vulgaris* Simon, 1870 were recorded

from Karaburun District (Kunt et al., 2012; Özkütük et al., 2013; Kaya et al., 2010; Logunov & Kunt, 2010); Oedothorax apicatus (Blackwall, 1850) was recorded from Çeşme District (Tanasevitch, 2011) and Scytodes velutina Heineken & Lowe, 1832 was recorded from Urla District (Kunt et al., 2012; Özkütük et al., 2013).

The purpose of this study is to determine the spider fauna of Çeşme, Karaburun, and Urla districts located in the İzmir Peninsula.

Material and Methods

In this study, basic arachnological and entomological collecting methods were used. Sampling studies were carried out within a certain plan according to the habitat preferences of spiders and this plan was tried to be complied with as much as possible. First, all habitats (under stones, wall cracks, cavities, tree bark and hollows, bush tops, etc.) were scanned using a hand aspirator. Then the plant debris was sieved, and the fallen specimens were also collected by hitting the accessible branches of the trees in the area. Finally, pitfall traps were set up near each habitat. The specimens were collected from Izmir Peninsula of Türkiye between December 2016 and April 2018. The specimens were collected by second author between 2008 and 2016 were also used in this study. Collected specimens were preserved in 70% ethanol and deposited in the Alaşehir Zoological Museum, Manisa Celal Bayar University, Alaşehir, Manisa, Türkiye (AZMM). Identifications were made with Leica EZ4 stereomicroscope. World distribution of the species is after the World Spider Catalog (2023). [PF = pitfall trap]

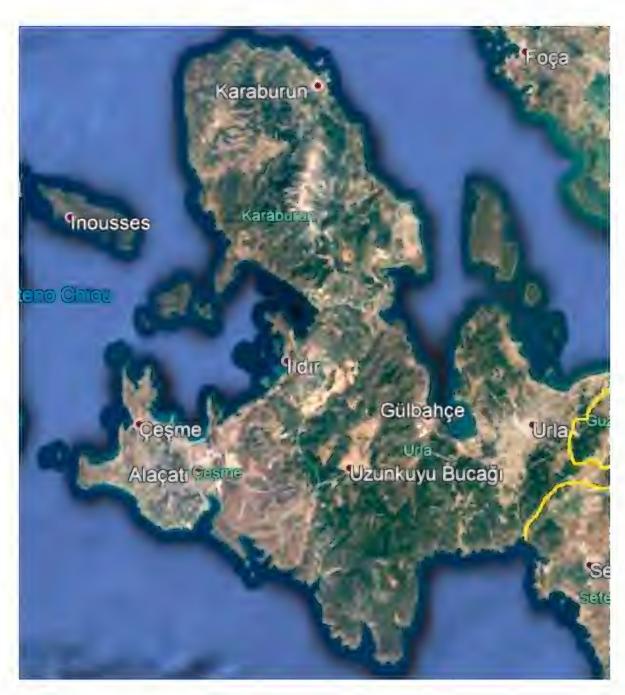


Fig. 1. Map showing İzmir Peninsula, west of İzmir province and the three districts: Çeşme, Karaburun, and Urla.

Results

In this study, 497 adult spiders $(299 \Im \Im, 198 \Im \Im)$ were collected from different locations in the İzmir Peninsula. As a result, 88 genera and 109 species belonging to 33 families were identified.

Family **Agelenidae** C.L. Koch, 1837 Genus *Maimuna* Lehtinen, 1967 *Maimuna vestita* (C.L. Koch, 1841)

Material examined: 1♀, Karaburun, Bozköy Village-1, 01.04.2018, 38°31'45"N, 26°27'46"E, 52 m. 1♀, 1♂, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. 1♀, Karaburun, Sazak Village, 02.02.2017-28.06.2017, 38°37'34"N, 26°23'21"E, 258 m, PF. 1♀, Karaburun, Center, 8 km South, 31.03.2018, 38°35'52"N, 26°29'59"E, 664m. 1♂, Karaburun, Center, 8 km South, 17.12.2016-14.05.2017, 38°35'52"N, 26°29'59"E, 664 m, PF. 1♀, Karaburun, Bozköy Village-1, 01.04.2018, 38°31'45"N, 26°27'46"E, 52 m. 1♂, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36'59"N, 26°28'05"E, 101 m, PF. 3♂♂, 1♀, Karaburun, Bozköy Village-2, 01.04.2018, 38°36'59"N, 26°28'05"E, 102 m. 1♂, Karaburun, Bozköy Dam Road, 02.02.2017-28.06.2017, 38°36'57"N, 26°27'56"E, 114 m, PF. 1♂, Urla, Gülbahçe Neighbourhood, 02.02.2017-14.05.2017, 38°21'13"N, 26°38'19"E, 31 m. 1♀, Urla, Zeytinler-1 Village, 30.03.2018, 38°17'35"N, 26°35'02"E, 307 m. 1♀, Urla, Zeytinler Village-2, 30.03.2018, 38°17'38"N, 26°34'36"E, 167 m.

World distribution: Italy, Croatia, Albania, North Macedonia, Bulgaria, Greece, Türkiye, Ukraine (Crimea).

Family Amaurobiidae Thorell, 1869

Genus Amaurobius C.L. Koch, 1837

Amaurobius erberi (Keyserling, 1863) (Fig. 2)

Material examined: 1♂, Urla, Zeytinler Village, 2 km Southeast, 38°16'30"N, 26°35'07"E, 135 m, PF, 19.03.2017-20.05.2017.

World distribution: Canary Is., Algeria, Europe, Türkiye, Caucasus, Iran.

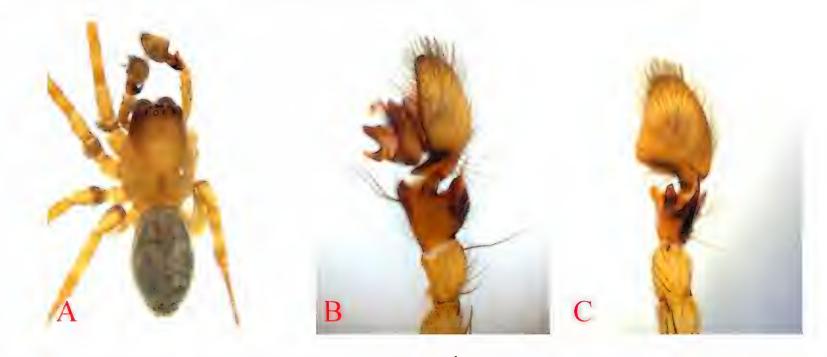


Fig. 2. *Amaurobius erberi* (Keyserling, 1863) \circlearrowleft . A. habitus, dorsal view. B-C. pedipalp. B. retrolateral view. C. dorsal view.

Family **Anyphaenidae** Bertkau, 1878 Genus *Anyphaena* Sundevall, 1833 *Anyphaena* sp. Material examined: 1 juv., Urla, Gülbahçe Neighbourhood, 3 km Southeast, 19.03.2017-20.05.2017, 38°17'48"N, 26°37'47"E, 53 m, PF.

Family **Araneidae** Clerk, 1757

Genus Aculepeira Chamberlin & Ivie, 1942

Aculepeira armida (Savigny, 1825)

Material examined: 1♀, Karaburun, 2 km South, 23.05.2012, 38°37'38"N, 26°29'26"E, 436 m. 1♂, Karaburun, leg. Yağmur, 06.06.2009.

World distribution: North Africa, Southern Europe, Türkiye, Israel, Russia (Europe to Far East), Iran, Central Asia to China.

Genus Agalenatea Archer, 1951

Agalenatea redii (Scopoli, 1763)

Material examined: 299, Karaburun, Bozköy Village-1, 01.04.2018, 38°31'45"N, 26°27'46"E, 52 m. 19, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m.

World distribution: Azores, Europe, Türkiye, Caucasus, Russia (Europe to South Siberia), Iran, Central Asia, China.

Genus Araneus Clerk, 1757

Araneus angulatus Clerk, 1757

Material examined: 1♀, Karaburun, leg. Yağmur, 06.06.2009.

World distribution: Europe, Türkiye, Russia (Europe to Far East), Iran, Central Asia, Korea.

Genus Araniella Chamberlin & Ivie, 1942

Araniella cucurbitina (Clerk, 1757)

Material examined: 1, Çeşme, Germiyan Village, 28.06.2017, $38^{\circ}19'43"N$, $26^{\circ}28'22"E$, 131 m. 1, Çeşme, Germiyan Village road junction, 28.06.2017, $38^{\circ}18'00"N$, $26^{\circ}28'45"E$, 112 m.

World distribution: Europe, Türkiye, Russia (Europe) to Central Asia, China, Korea.

Genus Cyclosa Menge, 1866

Cyclosa sierrae Simon, 1870

Material examined: 499, Karaburun, Bozköy Village-1, 01.04.2018, 38°31'45"N, 26°27'46"E, 52 m. 19, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. 499, Urla, Zeytinler-2 Village, 30.03.2018, 38°17'38"N, 26°34'36"E, 167 m. World distribution: Southern Europe, Hungary, Ukraine, Türkiye, Caucasus, Iran.

Genus *Mangora* O. Pickard-Cambridge, 1889

Mangora acalypha (Walckenaer, 1802)

Material examined: 1♀, Urla, Zeytinler Village, 5 km East, 20.05.2017, 38°16′56″N, 26°37′19″E, 56 m.

World distribution: Madeira, Europe, North Africa, Türkiye, Middle East, Caucasus, Russia (Europe to South Siberia), Central Asia, China.

Genus Neoscona Simon, 1864

Neoscona adianta (Walckenaer, 1802)

Material examined: $4\colon, 1\colon, 1\colon, 1\colon, 2\colon,$

38°16′56″N, 26°37′19″E, 56 m. 1♀, Çeşme, Germiyan Village, 28.06.2017, 38°19′43″N, 26°28′22″E, 131 m.

World distribution: Europe, North Africa to Central Asia, Russia (Europe to Far East), China, Korea, Japan.

Neoscona subfusca (C.L. Koch, 1837)

Material examined: 3♂♂, Çeşme, Germiyan Village road junction, 28.06.2017, 38°18'00"N, 26°28'45"E, 112 m. 1♂, Çeşme, Germiyan Village, 28.06.2017, 38°19'43"N, 26°28'22"E, 131 m. 1♂, Karaburun, leg. Yağmur, 06.06.2009. 1♂, Karaburun, Parlak Village, 06.06.2009, leg. Yağmur. 1♂, Çeşme, Germiyan Village road junction, 03.02.2017-27.06.2017, 38°18'00"N, 26°28'45"E, 112 m, PF. 1♀, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°39'45"N, 26°27'46"E, 52 m, PF. 1♂, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m.

World distribution: Southern Europe, Africa, Türkiye, Middle East, Ukraine, Caucasus, Russia (Europe) to Central Asia.

Genus Zilla C.L. Koch, 1834

Zilla diodia (Walckenaer, 1802)

Material examined: 2♀♀, Urla, Zeytinler-2 Village, 30.03.2018, 38°17'38"N, 26°34'36"E, 167 m.

World distribution: North Africa, Europe, Türkiye, Caucasus, Russia (Europe, West Siberia), Iran.

Family Cheiracanthiidae Wagner, 1887

Genus Cheiracanthium C.L. Koch, 1839

Cheiracanthium montanum L. Koch, 1877 (Fig. 3)

Material examined: 4♂♂, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m. 1♀, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Europe, Türkiye, Caucasus, Iran.



Fig. 3. *Cheiracanthium montanum* L. Koch, 1877. A-B. habitus, dorsal view. A. ♀. B. ♂. C. ♀ epigyne, ventral view. D. ♂ pedipalp, ventral view.

Family **Clubionidae** Wagner, 1887 **Genus** *Porrhoclubiona* Lohmander, 1944 *Porrhoclubiona genevensis* (L. Koch, 1866) Material examined: 1♀, Karaburun, Bozköy Village-2, 01.04.2018, 38°36′59″N, 26°28′05″E, 102 m. 1♀, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37′38″N, 26°29′22″E, 436 m.

World distribution: Azores, Europe, Türkiye, Caucasus, Russia (Europe to South Siberia), Iran, Central Asia.

Family **CTENIZIDAE** Thorell, 1887

Genus Cyrtocarenum Ausserer, 1871

Cyrtocarenum cunicularium (Olivier, 1811)

Material examined: 1♂, Çeşme, Ildır Village road junction, 30.03.2018, 38°18′00″N, 26°28′45″E, 112 m.

World distribution: Greece (incl. Crete, Rhodes), Türkiye.

Family **Dysderidae** C.L. Koch, 1837

Genus *Dysdera* Latreille, 1804

Dysdera fragaria Deeleman-Reinhold, 1988 (Fig. 4)

World distribution: Greece (Rhodes), Türkiye.



Fig. 4. *Dysdera fragaria* Deeleman-Reinhold, 1988 3. A. habitus, dorsal view. B. pedipalp, retrolateral view.



Fig. 5. *Dysdera* cf. *longirostris* Doblika, 1853 3. A. habitus, dorsal view. B. pedipalp, retrolateral view.

Dysdera cf. longirostris Doblika, 1853 (Fig. 5)

Material examined: 1♂, Karaburun, Center, 8 km South, 14.05.2017, 38°35'52"N, 26°29'59"E, 664 m.

World distribution: Central to south-eastern and eastern Europe, Türkiye, Caucasus.

Dysdera rubus Deeleman-Reinhold, 1988 (Fig. 6)

Material examined: 1\$\int\$, Karaburun, Sazak Village, 31.03.2018, 38\infty37'34\"N, 26\infty23'21\"E, 258 m.

World distribution: Türkiye, Greece.



Fig. 6. *Dysdera rubus* Deeleman-Reinhold, 1988 3. A. habitus, dorsal view. B. pedipalp, retrolateral view.



Fig. 7. *Dysdera westringi* O. Pickard-Cambridge, 1872 3. A. habitus, dorsal view. B. pedipalp, retrolateral view.

Dysdera westringi O. Pickard-Cambridge, 1872 (Fig. 7)

Material examined: $1 \circlearrowleft$, Urla, ZeytinlerVillage-2, 03.02.2017-27.06.2017, 38°17'38"N, 26°34'36"E, 167 m, PF. $2 \circlearrowleft \circlearrowleft$, $3 \circlearrowleft \circlearrowleft$, Karaburun, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Eastern Mediterranean, Iraq.

Genus *Harpactea* Bristowe, 1939 *Harpactea sturanyi* (Nosek, 1905)

Material examined: $2 \circlearrowleft \circlearrowleft$, Çeşme, Bozköy Barrage Road, 02.02.2017-28.06.2017, $38^{\circ}36'57"N$, $26^{\circ}27'56"E$, 114 m, PF. $1 \circlearrowleft$, $2 \circlearrowleft \circlearrowleft$, Karaburun, 3 km Southwest, 12.12.16-14.05.2017, $38^{\circ}37'38"N$, $26^{\circ}28'22"E$, 434 m, PF.

World distribution: Greece, Türkiye, Georgia.

Harpactea sp.

Material examined: 11&&, Urla, Zeytinler-2 Village, 38°17'38"N, 26°34'36"E, 167 m, PF, 03.02.2017-27.06.2017.

Genus Stalagtia Kratochvíl, 1970

Stalagtia thaleriana Chatzaki & Arnedo, 2006 (Fig. 8)

Material examined: 13, Urla, Zeytinler Village-2, 03.02.2017-27.06.2017, $38^{\circ}17'38"N$, $26^{\circ}34'36"E$, 167 m, PF. 299, 333, Karaburun, Sazak Village, 31.03.2018, $38^{\circ}37'34"N$, $26^{\circ}23'21"E$, 258 m.

World distribution: Greece (Crete), Türkiye.



Fig. 8. *Stalagtia thaleriana* Chatzaki & Arnedo, 2006 & A. habitus, dorsal view. B. pedipalp, retrolateral view.

Family Eresidae C.L. Koch, 1845

Genus Eresus Walckenaer, 1805

Eresus kollari Rossi, 1846

Material examined: 255, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Europe, Türkiye, Caucasus, Iran, China, Korea, Russia (to Far East)?, Central Asia?

Family Filistatidae Simon, 1864

Genus *Pritha* Lehtinen, 1967

Pritha sp.

Material examined: 1♂, Urla, Gülbahçe, 3 km Southwest, 38°17'48" N, 26°37'47" E, 53 m, 30.03.2018.

Family **Gnaphosidae** Banks, 1892

Genus Aphantaulax Simon, 1878

Aphantaulax cincta (L. Koch, 1866)

Material examined: 1♀, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m.

World distribution: Europe, Türkiye, Armenia, North Africa, Israel.

Genus Berinda Roewer, 1928

Berinda ensigera (O. Pickard-Cambridge, 1874) (Fig. 9)

Material examined: 1♀, Karaburun, Parlak Village-2, 17.12.2016-28.06.2017, 38°36′15″N, 26°22′55″E, 171 m, PF. 1♀, Karaburun, Bozköy Village-1, 01.04.2018, 38°31′45″N, 26°27′46″E, 52 m.

World distribution: Greece (incl. Crete), Türkiye.



Fig. 9. *Berinda ensigera* (O. Pickard-Cambridge, 1874) ♀. A. habitus, dorsal view. B. epigyne, ventral view.



Fig. 10. *Berinda hakani* Chatzaki & Seyyar, 2010 ♀. A. habitus, dorsal view. B. vulvae, ventral view.

Berinda hakani Chatzaki & Seyyar, 2010 (Fig. 10)

Material examined: 5♀♀, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°37'45"N, 26°27'46"E, 42 m, PF.

World distribution: Türkiye.

Genus Drassodes Westring, 1851

Drassodes lacertosus (O. Pickard-Cambridge, 1872)

Material examined: $2 \circlearrowleft \circlearrowleft$, $4 \circlearrowleft \circlearrowleft$, Karaburun, 2 km West, 23.05.2012, 38°37'38"N, 26°29'26"E, 436 m, leg. Yağmur.

World distribution: Greece, Türkiye, Israel, Syria.

Drassodes lapidosus (Walckenaer, 1802)

Material examined: $1\mathcappe$, Karaburun, Center, 8 km Southwest, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m. $1\mathcappe$, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°37'43"N, 26°27'46"E, 42 m, PF. $4\mathcappe$, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. $1\mathcape{d}$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, 19.03.2017-20.05.2017, 38°17'50"N, 26°38'01"E, 53 m, PF.

World distribution: Azores, Europe, Türkiye, Caucasus, Russia (Europe to Far East), Israel, Iran, Central Asia, China, Korea, Japan.

Genus *Marinarozelotes* Ponomarev, 2020

Marinarozelotes barbatus (L. Koch, 1866)

Material examined: $4 \circlearrowleft \circlearrowleft$, $1 \circlearrowleft$, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m.

World distribution: Mediterranean to Caucasus. Introduced to USA.

Marinarozelotes malkini (Platnick & Murphy, 1984)

Material examined: 1♂, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°37'43"N, 26°27'46"E, 42 m, PF. 1♀, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36'54"N, 26°28'05"E, 101 m, PF.

World distribution: Romania, Albania, North Macedonia, Bulgaria, Greece, Ukraine, Russia (Europe, Caucasus), Türkiye, Iran, Kazakhstan.

Genus Nomisia Dalmas, 1921

Nomisia exornata (C.L. Koch, 1839)

Material examined: 233, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36'59"N, 26°28'05"E, 101 m, PF.

World distribution: Europe, North Africa, Türkiye, Caucasus, Kazakhstan, Central Asia.

Nomisia ripariensis (O. Pickard-Cambridge, 1872)

Material examined: 1♀, Çeşme, Near Alaçatı Dam, 20.05.2017, 38°16'54"N, 26°26'14"E, 103 m.

World distribution: Bulgaria, Greece (incl. Crete), Türkiye, Caucasus (Russia, Azerbaijan), Syria, Lebanon, Israel, Iran.

Genus Pterotricha Kulczyński, 1903

Pterotricha lentiginosa (C.L. Koch, 1837)

Material examined: 1♂, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36'59"N, 26°28'05"E, 101 m, PF.

World distribution: Serbia, Montenegro, Ukraine, Greece, Cyprus, Türkiye, Iran?.

Genus Zelotes Gistel, 1848

Zelotes aeneus (Simon, 1878) (Fig. 11)

Material examined: Karaburun, 1, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m.

World distribution: Madeira, Europe, Türkiye, Azerbaijan.

Zelotes balcanicus Deltshev, 2006 (Fig. 12)

Material examined: Karaburun, $1 \circlearrowleft$, Bozköy Village, 02.02.2017-28.06.2017, 38°37'45"N, 26°27'46"E, 42 m, PF. Urla, $2 \circlearrowleft \circlearrowleft$, Zeytinler Village, 2 km Southeast, 19.03.2017-20.05.2017, 38°16'30"N, 26°35'07"E, 135 m, PF.

World distribution: Italy, North Macedonia, Bulgaria, Romania, Greece, Türkiye, Israel.



Fig. 11. Zelotes aeneus (Simon, 1878) ♀. A. habitus, dorsal view. B. epigyne, ventral view.



Fig. 12. Zelotes balcanicus Deltshev, 2006. A-B. habitus, dorsal view. A. ♀. B. ♂. C. ♀ epigyne, ventral view. D. ♂ pedipalp, ventral view.

Zelotes tenuis (L. Koch, 1866)

Material examined: 1\,\text{, Urla, G\"ulbah\"ce Neighbourhood, 3 km Southwest, 30.03.2018, 38\"oldot 17'48\"N, 26\"oldot 37'47\"E, 53 m.

World distribution: Mediterranean and Central Europe to Russia (Caucasus), Iran; Introduced to Galapagos Is., USA.

Family Hahniidae Bertkau, 1878

Genus Hahnia C.L. Koch, 1841

Hahnia sp.

Material examined: 1 juv., Karaburun, Center, 8 km South, 14.05.2017, 38°35'52"N, 26°29'59"E, 664 m.

Family Linyphiidae Blackwall, 1859

Genus Frontinellina van Helsdingen, 1969

Frontinellina frutetorum (C.L. Koch, 1835)

Material examined: $1\mathcappe$, Karaburun, Center, 8 km Southwest, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m. $1\mathcappe$, Karaburun, Center, 8 km South, 17.12.2016-14.05.2017, 38°35'52"N, 26°29'59"E, 664 m, PF. $1\mathcappe$, Karaburun, Center, 8 km South, 14.05.2017, 38°35'52"N, 26°29'59"E, 664 m.

World distribution: Europe, North Africa, Türkiye, Caucasus, Russia (Europe to South Siberia), Iran, Kazakhstan, Central Asia.

Genus Megalepthyphantes Wunderlich, 1994

Megalepthyphantes cf. pseudocollinus Saaristo, 1997

Material examined: 299, Karaburun, Parlak Village, 2 km North, 27.12.2009, leg. Yağmur. 19, Karaburun, 3 km Southwest, 17.12.2016-14.05.2017, 38°37'38"N, 26°28'22"E, 434 m, PF.

World distribution: Europe, Russia (Europe to West Siberia), Caucasus, Türkiye, Iran.

Genus Neriene Blackwall, 1833

Neriene furtiva (O. Pickard-Cambridge, 1871)

Material examined: $1\mathcappe$, Karaburun, Center, 3 km Southwest, 14.05.2017, $38^{\circ}37'38"N$, $26^{\circ}29'22"E$, 436 m. $4\mathcappe$, Karaburun, Center, 3 km Southwest, 31.03.2018, $38^{\circ}37'38"N$, $26^{\circ}29'22"E$, 436 m. $2\mathcappe$, $5\mathcappe$, Karaburun, Center, 3 km Southwest, 31.03.2018, $38^{\circ}37'38"N$, $26^{\circ}28'22"E$, 436 m. $1\mathcappe$, Karaburun, Center, 8 km South, 17.12.2016-14.05.2017, $38^{\circ}35'52"N$, $26^{\circ}29'59"E$, 664 m, PF. $1\mathcappe$, Karaburun, Parlak Village, 2 km North, 27.12.2009, leg. Yağmur.

World distribution: Europe, North Africa, Türkiye, Russia (Europe to South Siberia).

Genus Pelecopsis Simon, 1864

Pelecopsis elongata (Wider, 1834)

Material examined: 1\$\int\$, Karaburun, 3 km Southwest, 17.12.2016-14.05.2017, 38\infty37'38"N, 26\infty28'22"E, 436 m, PF.

World distribution: Europe, Türkiye, Israel.

Genus Sintula Simon, 1884

Sintula retroversus (O. Pickard-Cambridge, 1875)

Material examined: 1♀, Urla, Zeytinler Village, 03.02.2017-27.06.2017, 38°17'35"N, 26°35'02"E, 301 m, PF. 1♀, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°38'45"N, 26°27'46"E, 42 m, PF.

World distribution: Europe, Türkiye, Caucasus.

Family **Liocranidae** Simon, 1897

Genus Agroeca Westring, 1861

Agroeca parva Bosmans, 2011

Material examined: 3♀♀, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36′59″N, 26°28′05″E, 101 m, PF. 1♀, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°37′45″N, 26°27′46″E, 42 m, PF.

World distribution: Greece, Cyprus, Türkiye, Israel, Iran.

Genus Apostenus Westring, 1851

Apostenus fuscus Westring, 1851

Material examined: 3\$\pi\$, Karaburun, Parlak Village-2, 17.12.2016-28.06.2017, 38°36'15"N, 26°22'55"E, 171 m, PF.

World distribution: Europe.

Genus Mesiotelus Simon, 1897

Mesiotelus scopensis Drensky, 1935 (Fig. 13)

Material examined: 299, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 434 m. 199, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 434 m. 199, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°37'45"N, 26°27'46"E, 42 m, PF. 2999, Karaburun, Bozköy Village-1, 01.04.2018,

World distribution: North Macedonia, Bulgaria, Greece, Türkiye, Iran.



Fig. 13. *Mesiotelus scopensis* Drensky, 1935. A-B. habitus, dorsal view. A. ♀. B. ♂. C. ♀ epigyne, ventral view. D. ♂ pedipalp, ventral view.

Mesiotelus tenuissimus (L. Koch, 1866)

Material examined: 1♂, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. 1♀, Karaburun, Parlak Village, 1 km West, 17.01.2009, 38°35'59"N, 26°23'18"E, leg. Yağmur. 5♀♀, Karaburun, Parlak Village-2, 17.12.2016-28.06.2017, 38°36'15"N, 26°22'55"E, 171 m, PF. 1♀, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m.

World distribution: Southern Europe, North Africa, Cyprus, Türkiye, Jordan, Turkmenistan.

Family Lycosidae Sundevall, 1833

Genus Alopecosa Simon, 1885

Alopecosa albofasciata (Brullé, 1832)

Material examined: $2 \circlearrowleft \circlearrowleft$, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, $38^{\circ}36'57"N$, $26^{\circ}28'05"E$, 101 m, PF. $1 \circlearrowleft$, Karaburun, 23.03.2015-23.05.2015, $38^{\circ}37'38"N$, $26^{\circ}29'26"E$, 436 m, leg. Yağmur, PF. $2 \circlearrowleft \circlearrowleft$, Karaburun, Center, 3 km Southwest, 31.03.2018, $38^{\circ}37'38"N$, $26^{\circ}29'22"E$, 436 m. $1 \circlearrowleft$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, 19.03.2017-20.05.2017, $38^{\circ}17'48"N$, $26^{\circ}37'47"E$, 56 m, PF. $1 \circlearrowleft$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, $38^{\circ}17'48"N$, $26^{\circ}37'47"E$, 53 m. $1 \circlearrowleft$, Urla, Zeytinler Village-1, 03.02.2017-27.06.2017, $38^{\circ}17'35"N$, $26^{\circ}35'02"E$, 307 m. $3 \circlearrowleft \circlearrowleft$, Çeşme, Germiyan Village, 19.03.2017-27.06.2017, $38^{\circ}19'43"N$, $26^{\circ}28'22"E$, 131 m, PF.

World distribution: Mediterranean to Central Asia.

Genus *Hogna* Simon, 1885 *Hogna radiata* (Latreille, 1817)

Material examined: $3 \circlearrowleft \circlearrowleft , 2 \circlearrowleft \circlearrowleft$, Karaburun, Sazak Village, $31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. <math>1 \circlearrowleft , 3 \circlearrowleft \circlearrowleft ,$ Karaburun, Center, 3 km Southwest, $31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. <math>1 \circlearrowleft ,$ Karaburun, Center, 8 km Southwest, $31.03.2018, 38°35'52"N, 26°29'59"E, 664 m. <math>2 \circlearrowleft \circlearrowleft , 1 \backsim ,$ Karaburun, Bozköy Village-2, $01.04.2018, 38°36'59"N, 26°28'05"E, 102 m. <math>1 \backsim , 3 \circlearrowleft \circlearrowleft ,$ Urla, Gülbahçe Neighbourhood, $31.03.2018, 38°21'13"N, 26°38'19"E, 31 m. <math>2 \circlearrowleft \circlearrowleft ,$ $1 \backsim ,$ Urla, Gülbahçe Neighbourhood, $31.03.2018, 38°21'13"N, 26°38'19"E, 31 m. <math>2 \circlearrowleft \circlearrowleft ,$ $1 \backsim ,$ Urla, Gülbahçe Neighbourhood, $31.03.2018, 38°21'13"N, 26°38'19"E, 31 m. <math>2 \circlearrowleft \circlearrowleft ,$ Urla, $30.03.2018, 38°17'35"N, 26°35'02"E, 307 m. <math>3 \circlearrowleft \circlearrowleft ,$ Urla, Zeytinler Village-1, $30.03.2018, 38°17'35"N, 26°35'02"E, 307 m. <math>1 \backsim ,$ Urla, Zeytinler Village-2, 30.03.2018, 38°17'38"N, 26°34'36"E, 167 m.

World distribution: Europe, Türkiye, Caucasus, Russia (Europe to South Siberia), Kazakhstan, Iraq, Iran, Central Asia.

Genus *Lycosa* Latreille, 1804

Lycosa tarantula (Linnaeus, 1758)

Material examined: 1♂, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m.

World distribution: France (Corsica), Italy, Balkans, Türkiye, Middle East.

Genus Pirata Sundevall, 1833

Pirata piraticus (Clerck, 1757)

Material examined: 1♀, Urla, Zeytinler Village, 5 km East, 20.05.2017, 38°16′56″N, 26°37′19″E, 56 m.

World distribution: North America, Europe, Türkiye, Caucasus, Russia (Europe to Far East), Kazakhstan, Iran, Central Asia, China, Japan.

Genus Trochosa C.L. Koch, 1847

Trochosa ruricola (De Geer, 1778)

Material examined: 1♀, Urla, Gülbahçe Neighbourhood, 31.03.2018, 38°21'13"N, 26°38'19"E, 31 m.

World distribution: Europe, Türkiye, Caucasus, Russia (Europe to Far East), Kazakhstan, Iran, Central Asia, China, Japan, Korea. Introduced to North America, Cuba, Puerto Rico, Bermuda.



Fig. 14. *Mimetus laevigatus* (Keyserling, 1863). A-B. habitus, dorsal view. A. ♀. B. ♂. C. ♀ epigyne, ventral view. D. ♂ pedipalp, ventral view.

Family **Mimetidae** Simon, 1881 Genus *Ero* C.L. Koch, 1836 *Ero aphana* (Walckenaer, 1802) Material examined: 1♀, Karaburun, Parlak Village, 2 km North, 27.12.2009, leg. Yağmur.

World distribution: Europe, Macaronesia, North Africa, Türkiye, Caucasus, Russia (Europe to Central Asia), Kazakhstan, Iran. Introduced to St. Helena, Réunion, Japan (Ryukyu Is.), China, Philippines, Australia (Queensland, Western Australia).

Genus Mimetus Hentz, 1832

Mimetus laevigatus (Keyserling, 1863) (Fig. 14)

Material examined: 1♂, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m. 1♀, Urla, Zeytinler Village, 5 km East, 20.05.2017, 38°16'56"N, 26°37'19"E, 56 m.

World distribution: Mediterranean to Central Asia.

Family Nemesiidae Simon, 1889

Genus Brachythele Ausserer, 1871

Brachythele varrialei (Dalmas, 1920)

Material examined: 1\$\infty\$, Karaburun, Sazak Village, 31.03.2018, 38\oldox37'34\oldoxN, 26\oldox23'21\oldoxE, 258 m.

World distribution: Türkiye.

Family Oecobiidae Blackwall, 1862

Genus Oecobius Lucas, 1846

Oecobius sp.

Material examined: 1 juv., Karaburun, Center, 3 km Southwest, 17.12.2016-14.05.2017, 38°37'38"N, 26°28'22"E, 434 m, PF.

Family **Oxyopidae** Thorell, 1869

Genus Oxyopes Latreille, 1804

Oxyopes heterophthalmus (Latreille, 1804)

Material examined: 1♀, Çeşme, Germiyan Village road junction, 28.06.2017, 38°18′00″N, 26°28′45″E, 112 m.

World distribution: Europe, North Africa to Middle East, Türkiye, Caucasus, Kazakhstan, China.

Family Palpimanidae Thorell, 1869

Genus Palpimanus Dufour, 1820

Palpimanus uncatus Kulczyński, 1909 (Fig. 15)

Material examined: $1\mathbb{Q}$, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m. $7\mathbb{Q}$, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. $1\mathbb{Q}$, Karaburun, Badembükü road junction, 1 km inland, 28.03.2008, 38°36'16"N, 26°22'54"E, leg. Yağmur. $1\mathbb{Q}$, Karaburun, 24 m, 23.03.2012, leg. Yağmur. $1\mathbb{Q}$, Karaburun, Center, 8 km South, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m. $1\mathbb{Q}$, Karaburun, Center, 8 km Southwest, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m. $2\mathbb{Q}$, Karaburun, Bozköy Village-2, 01.04.2018, 38°36'59"N, 26°28'05"E, 102 m. $1\mathbb{Q}$, Karaburun, Parlak Village-2, 17.12.2016-28.06.2017, 38°36'15"N, 26°22'55"E, 171 m, PF. $1\mathbb{Q}$, $2\mathbb{Q}$, Urla, Gülbahçe Neighbourhood, 02.02.2017-14.05.2017, 38°21'13"N, 26°38'19"E, 31 m, PF. $3\mathbb{Q}$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, 38°17'48"N, 26°37'47"E, 53 m. $1\mathbb{Q}$, Çeşme, near Alaçatı Dam, 03.02.2017-20.05.2017, 38°16'54"N, 26°26'14"E, 103

m, PF. 13, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36'59"N, 26°28'05"E, 101 m, PF.

World distribution: Greece, Türkiye, Egypt.



Fig. 15. *Palpimanus uncatus* Kulczyński, 1909. A-B. habitus, dorsal view. A. ♀. B. ♂. C. ♀ epigyne, ventral view. D. ♂ pedipalp, retrolateral view.

Family **Philodromidae** Thorell, 1869

Genus Thanatus C.L. Koch, 1837

Thanatus pictus L. Koch, 1881

Material examined: 2♀♀, Karaburun, 24 m, 23.03.2012, leg. Yağmur. 1♀, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Europe, Türkiye, Caucasus, Russia (Europe to West Siberia), Kazakhstan, Iran.

Family **Pholcidae** C.L. Koch, 1850

Genus Holocnemus Simon, 1873

Holocnemus pluchei (Scopoli, 1763)

Material examined: 1♀, 1♂, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. 1♀, Çeşme, Bozköy Dam road, 02.02.2017-28.06.2017, 38°36'57"N, 26°27'56"E, 114 m, PF.

World distribution: Europe, North Africa, Türkiye, Azerbaijan, Caucasus, Middle East. Introduced to USA, Argentina, Japan, Australia.

Family **Pisauridae** Simon, 1890

Genus Pisaura Simon, 1886

Pisaura mirabilis (Clerck, 1757)

Material examined: $1\capp2$, $1\capp3$, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m. $1\capp3$, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'26"E, 436 m. $1\capp3$, Karaburun, 2 km South, 23.05.2012, 38°37'38"N, 26°29'26"E, 436 m, leg. Yağmur. $1\capp3$, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. $2\capp3$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, 38°17'48"N, 26°37'47"E, 53 m. $1\capp3$, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°34'53"N, 26°28'05"E, 101 m, PF.

World distribution: Europe, Türkiye, Middle East, Caucasus, Russia (Europe to Middle Siberia), Central Asia, China.

Family Salticidae Blackwall, 1841

Genus *Cyrba* Simon, 1876

Cyrba algerina (Lucas, 1846)

Material examined: 1♀, Karaburun, Parlak Village-2, 17.12.2016-28.06.2017, 38°36′15″N, 26°22′55″E, 171 m, PF. 1♂, Çeşme, Ildır Village road junction, 03.02.2017-27.06.2017, 38°18′00″N, 26°28′45″E, 112 m, PF.

World distribution: Canary Is. to Central Asia.

Genus Evarcha Simon, 1902

Evarcha jucunda (Lucas, 1846)

Material examined: 1♀, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. 1♂, Urla, Zeytinler Village, 2 km Southeast, 30.03.2018, 38°16'30"N, 26°35'07"E, 135 m.

World distribution: Canary Is., Mediterranean. Introduced to Belgium, Germany.

Genus Habrocestum Simon, 1876

Habrocestum papilionaceum (L. Koch, 1867)

Material examined: 2♀♀, 1♂, Karaburun, Bozköy Village-1, 01.04.2018, 38°37'45"N, 26°27'46"E, 52 m. 1♂, Karaburun, Bozköy Village-1, 02.02.2017-28.06.2017, 38°37'45"N, 26°27'46"E, 52 m, PF.

World distribution: Greece, Türkiye.

Genus Heliophanus C.L. Koch, 1833

Heliophanus kochii Simon, 1868

Material examined: $3 \circlearrowleft \circlearrowleft$, Karaburun, Center, 8 km South, 17.12.2016-14.05.2017, 38°35'52"N, 26°29'59"E, 664 m, PF. $2 \circlearrowleft \circlearrowleft$, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. $4 \circlearrowleft \circlearrowleft$, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. $1 \circlearrowleft$, Karaburun, 24 m, 23.03.2012, leg. Yağmur. $2 \circlearrowleft \circlearrowleft$, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m. $1 \circlearrowleft$, $1 \circlearrowleft \circlearrowleft$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, 38°17'48"N, 26°37'47"E, 53 m. $1 \circlearrowleft$, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36'59"N, 26°28'05"E, 101 m, PF.

World distribution: Macaronesia, North Africa, Europe, Türkiye, Caucasus, Middle East, Kazakhstan. Introduced to Canada, USA.

Genus Leptorchestes Thorell, 1870

Leptorchestes berolinensis (C.L. Koch, 1846)

Material examined: 1♀, Çeşme, Germiyan Village, 28.06.2017, 38°19'43"N, 26°28'22"E, 131 m.

World distribution: Europe to Turkmenistan.

Genus *Macaroeris* Wunderlich, 1992

Macaroeris nidicolens (Walckenaer, 1802)

Material examined: 255, Karaburun, Center, 8 km South, 17.12.2016-14.05.2017, 38°35'52"N, 26°29'39"E, 664 m, PF.

World distribution: Macaronesia, Europe, North Africa to Türkiye, Caucasus, Turkmenistan, Iran. Introduced to Sri Lanka.

Genus Mogrus Simon, 1882

Mogrus neglectus (Simon, 1868) (Fig. 16)

Material examined: 1♀, Çeşme, Ildır Village road junction, 03.02.2017-27.06.2017, 38°18′00″N, 26°28′45″E, 112 m, PF.

World distribution: North Macedonia, Greece, Türkiye, Cyprus, Israel, Caucasus (Russia, Azerbaijan), Iran, Kazakhstan.



Fig. 16. *Mogrus neglectus* (Simon, 1868) ♀. A. habitus, dorsal view. B. vulvae, ventral view.

Genus Phlegra Simon, 1876

Phlegra fasciata (Hahn, 1826)

Material examined: 1\$\operaction\$, Urla, Germiyan Village, 19.03.2017-23.06.2017, 38°19'43"N, 26°28'22"E, 131 m, PF.

World distribution: Europe, Türkiye, Caucasus, Russia (Europe to Far East), Kazakhstan, Central Asia, Iran, Afghanistan, India, China, Mongolia, Korea, Japan.

Genus *Plexippoides* Prószyński, 1984

Plexippoides flavescens (O. Pickard-Cambridge, 1872)

Material examined: 1♀, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m.

World distribution: Egypt, Sudan, Middle East, Iran, Kyrgyzstan, Turkmenistan, Afghanistan. Introduced to Ukraine.

Genus *Pseudeuophrys* Dahl, 1912

Pseudeuophrys lanigera (Simon, 1871)

Material examined: 1♀, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. 1♀, Karaburun, Center, 8 km South, 17.12.2016-14.05.2017, 38°35'52"N, 26°29'59"E, 664 m, PF. 1♀, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-2, 30.03.2018, 38°17'50"N, 26°38'01"E, 53 m. 4♀♀, Urla, Zeytinler Village, 2 km Southeast, 30.03.2018, 38°16'30"N, 26°35'07"E, 135 m.

World distribution: Europe, Türkiye, Caucasus, Iran?. Introduced to USA.

Pseudeuophrys obsoleta (Simon, 1868)

Material examined: Karaburun, 1♂, Center, 8 km South, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m.

World distribution: Europe (not Scandinavia), Türkiye, Caucasus, Russia (Europe to Far East), Central Asia, China.

Genus Saitis Simon, 1876

Saitis tauricus Kulczyński, 1905 (Fig. 17)

Material examined: 699, Karaburun, Center, 8 km South, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m. 233, Karaburun, Bozköy Village-1, 01.04.2018, 38°31'45"N, 26°27'46"E, 52 m. 299, 13, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-2, 15.03.2017-20.05.2017, 38°17'50"N, 26°38'01"E, 53 m, PF. 13, Urla, Zeytinler Village-2, 03.02.2017-27.06.2017, 38°17'38"N, 26°34'36"E, 167 m, PF.

World distribution: Italy, Hungary, North Macedonia, Bulgaria, Greece, Türkiye, Ukraine.



Fig. 17. Saitis tauricus Kulczyński, 1905. A-B. habitus, dorsal view. A. ♀. B. ♂. C. ♀ epigyne, ventral view. D. ♂ pedipalp, ventral view.

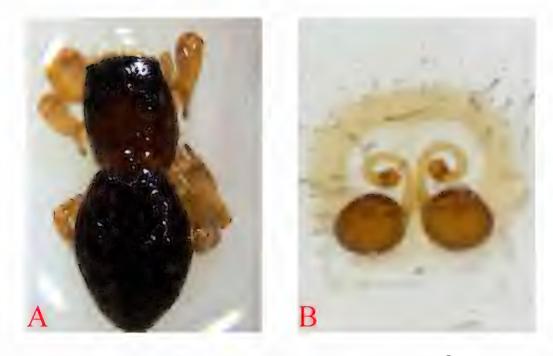


Fig. 18. *Talavera aequipes* (O. Pickard-Cambridge, 1871) ♀. A. habitus, dorsal view. B. vulvae, ventral view.

Genus Synageles Simon, 1876

Synageles dalmaticus (Keyserling, 1863)

Material examined: 1♀, 1♂, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m.

World distribution: Mediterranean, Bulgaria, Romania, Ukraine, Russia (Europe), Caucasus, Azerbaijan.

Genus Talavera G.W. Peckham & E.G. Peckham, 1909

Talavera aequipes (O. Pickard-Cambridge, 1871) (Fig. 18)

Material examined: 1♀, Karaburun, Sazak Village, 38°37'34"N, 26°23'21"E, 258 m, 31.03.2018.

World distribution: Europe, Türkiye, Israel, Caucasus, Iran, Russia (Europe) to Central Asia, China, Japan.

Family Scytodidae Blackwall, 1864

Genus Scytodes Latreille, 1804

Scytodes thoracica (Latreille, 1802)

Material examined: $3 \circlearrowleft \circlearrowleft$, $1 \circlearrowleft$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, 19.03.2017-20.05.2017, $38^{\circ}17'50"N$, $26^{\circ}38'01"E$, 53 m, PF.

World distribution: Europe, North Africa, Türkiye, Iran, temperate Asia to China, Korea, Japan. Introduced to North America, Argentina, South Africa, India, Australia, New Zealand.

Scytodes velutina Heineken & Lowe, 1832

Material examined: 1♂, Karaburun, Bozköy Village-2, 01.04.2018, 38°36'59"N, 26°28'05"E, 102 m.

World distribution: Mediterranean, Cape Verde Is., Seychelles.

Family **Segestriidae** Simon, 1893

Genus Ariadna Savigny, 1825

Ariadna sp.

Material examined: 1 juv., Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m.

Family Sicariidae Keyserling, 1880

Genus Loxosceles Heineken & Lowe, 1832

Loxosceles rufescens (Dufour, 1820)

Material examined: 4♀♀, 1♂, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-2, 30.03.2018, 38°17′50″N, 26°38′01″E, 53 m.

World distribution: Southern Europe, northern Africa to Iran, Afghanistan. Introduced to USA, Mexico, Peru, Macaronesia, South Africa, India, China, Japan, Korea, Laos, Thailand, Australia, Hawaii.



Fig. 19. *Micrommata ligurina* (C.L. Koch, 1845) ♀. A. habitus, dorsal view. B. epigyne, ventral view.

Family Sparassidae Bertkau, 1872

Genus Eusparassus Simon, 1903

Eusparassus walckenaeri (Audouin, 1825)

Material examined: 1♀, Karaburun, Parlak Village-2, 17.12.2016-28.06.2017, 38°36′15″N, 26°22′55″E, 171 m, PF. 2♀♀, Karaburun, Bozköy Village-1, 01.04.2018,

38°31'45"N, 26°27'46"E, 52 m. 1♂, Karaburun, Bozköy Village-2, 01.04.2018, 38°36'59"N, 26°28'05"E, 102 m. 3♀♀, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. 1♂, Çeşme, Germiyan Village road junction, 03.02.2017-27.06.2017, 38°18'00"N, 26°28'45"E, 112 m, PF.

World distribution: Greece, Türkiye, Algeria to Iraq, Sudan, Iran?.

Genus Micrommata Latreille, 1804

Micrommata ligurina (C.L. Koch, 1845) (Fig. 19)

Material examined: 1♀, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°28'22"E, 436 m. 3♀♀, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, 38°17'48"N, 26°37'47"E, 53 m.

World distribution: Mediterranean to Central Asia.

Family **Tetragnathidae** Menge, 1866

Genus *Tetragnatha* Latreille, 1804

Tetragnatha nitens (Savigny, 1825)

Material examined: 599, 433, Urla, Zeytinler Village, 5 km East, 20.05.2017, $38^{\circ}16'56"N$, $26^{\circ}37'19"E$, 56 m.

World distribution: Egypt. Tropical and subtropical Asia. Introduced to the Americas, Macaronesia, Mediterranean, South Africa, Madagascar, Pacific Is., New Zealand.

Family Theridiidae Sundevall, 1833

Genus Argyrodes Simon, 1864

Argyrodes argyrodes (Walckenaer, 1841)

Material examined: 1♀, Karaburun, Parlak Village, 28.06.2017, 38°37'32"N, 26°23'21"E, 633 m.

World distribution: Mediterranean to West Africa. Introduced to South Africa, Seychelles, Hawaii.

Genus *Crustulina* Menge, 1868

Crustulina scabripes Simon, 1881

Material examined: $1\mathcappe$, Karaburun, Parlak Village-2, 17.12.2016-28.06.2017, 38°36'15"N, 26°22'55"E, 171 m, PF. $1\mathcappe$, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m. $2\mathcappe$, Çeşme, Bozköy Dam road, 02.02.2017-28.06.2017, 38°36'57"N, 26°27'54"E, 114 m, PF.

World distribution: Mediterranean.

Genus Cryptachaea Archer, 1946

Cryptachaea riparia (Blackwall, 1834)

Material examined: 1\$\operatorname{Q}\$, Karaburun, Bozköy Village-2, 02.02.2017-28.06.2017, 38°36'59"N, 26°28'05"E, 101 m, PF.

World distribution: Europe, Türkiye, Caucasus, Russia (Europe to Far East), China, Korea, Japan.

Genus Dipoena Thorell, 1869

Dipoena braccata (C.L. Koch, 1841)

Material examined: 299, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Europe, Mediterranean, Caucasus.

Dipoena galilaea Levy & Amitai, 1981 (Fig. 20)

Material examined: Urla, 1, 2, 3, Zeytinler Village, 6 km East, $38^{\circ}26'48''$ N, $26^{\circ}37'43''$ E, 56 m, 20.05.2017.

World distribution: Greece, Cyprus, Israel, Türkiye.

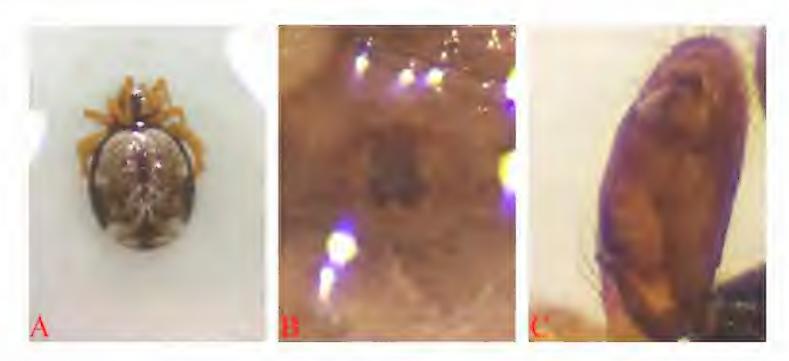


Fig. 20. *Dipoena galilaea* Levy & Amitai, 1981. A. ♀ habitus, dorsal view. B. ♀ epigyne, ventral view. C. ♂ pedipalp, ventral view.

Genus *Enoplognatha* Pavesi, 1880

Enoplognatha afrodite Hippa & Oksala, 1983

Material examined: Karaburun, $4 \circlearrowleft \circlearrowleft$, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. $3 \circlearrowleft \circlearrowleft$, Karaburun, Center, 8 km Southwest, 14.05.2017, 38°37'38"N, 26°29'27"E, 436 m. $1 \circlearrowleft$, Urla, Zeytinler Village, 2 km Southeast, 19.03.2017-20.05.2017, 38°15'30"N, 26°35'07"E, 135 m, PF. $1 \circlearrowleft$, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m.

World distribution: Southern Europe.

Enoplognatha diversa (Blackwall, 1859)

Material examined: 1♂, Karaburun, Center, 3 km Southwest, 38°37'38"N, 26°29'22"E, 436 m, 31.03.2018.

World distribution: Canary Is., Madeira, Portugal, Spain, France, Morocco to Greece.

Genus Episinus Walckenaer, 1809

Episinus truncatus Latreille, 1809

Material examined: 1♂, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Europe, Türkiye, Caucasus, Iran.

Genus *Euryopis* Menge, 1868

Euryopis episinoides (Walckenaer, 1847)

Material examined: 1♂, Karaburun, Bozköy Village-1, 01.04.2018, 38°31'45"N, 26°27'46"E, 52 m. 1♀, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m.

World distribution: Mediterranean to Türkiye, Israel. Introduced to South Africa, Reunion, India, China.

Genus Kochiura Archer, 1950

Kochiura aulica (C.L. Koch, 1838)

Material examined: 1♂, Karaburun, Bozköy Village-1, 01.04.2018, 38°31'45"N, 26°27'46"E, 52 m. 1♀, Urla, Zeytinler Village, 6 km East, 20.05.2017, 38°26'48"N, 26°37'43"E, 56 m.

World distribution: Cape Verde Is., Canary Is., North Africa, Europe, Türkiye, Caucasus, Iran.

Genus Neottiura Menge, 1868

Neottiura herbigrada (Simon, 1873)

Material examined: $5\finorall$, 1\Q, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, 38°17'48"N, 26°37'47"E, 53 m. $13\finorall$ Q, Karaburun, Center, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Madeira, Mediterranean, Ukraine, China, Korea.

Genus Simitidion Wunderlich, 1992

Simitidion simile (C.L. Koch, 1836) (Fig. 21)

Material examined: $5 \circlearrowleft \circlearrowleft$, $1 \hookrightarrow \circlearrowleft$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, 38°17'48"N, 26°37'47"E, 53 m. $13 \hookrightarrow \circlearrowleft$, Karaburun, 3 km Southwest, 14.05.2017, 38°37'38"N, 26°29'22"E, 436 m.

World distribution: Europe, North Africa, Türkiye, Israel, Caucasus, Kazakhstan, Iran, Central Asia. Introduced to Canada.



Fig. 21. Simitidion simile (C.L. Koch, 1836) ♀. A. habitus, dorsal view. B. epigyne, ventral view.

Genus *Steatoda* Sundevall, 1833

Steatoda paykulliana (Walckenaer, 1806)

Material examined: 299, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. 19, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. 299, Urla, Zeytinler Village-1, 30.03.2018, 38°17'35"N, 26°35'02"E, 307 m. 199, Çeşme, near Alaçatı Dam, 03.02.2017-20.05.2017, 38°16'54"N, 26°26'14"E, 103 m, PF. World distribution: Europe, Mediterranean to Central Asia, India.

Genus Theridion Walckenaer, 1805

Theridion adrianopoli Drensky, 1915

Material examined: 1♂, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°28'22"E, 436 m.

World distribution: North Macedonia, Bulgaria, Albania, Greece (incl. Crete), Türkiye.

Theridion melanurum Hahn, 1831

Material examined: 299, Çeşme, near Alaçatı Dam, 20.05.2017, 38°16'54"N, 26°26'14"E, 103 m.

World distribution: Macaronesia, North Africa, Europe, Türkiye, Caucasus, Russia (Europe to Middle Siberia), Middle East. Introduced to USA.

Theridion mystaceum L. Koch, 1870

Material examined: $2 \circlearrowleft \circlearrowleft$, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. $1 \circlearrowleft$, $3 \circlearrowleft \circlearrowleft$, Urla, Gülbahçe Neighbourhood, 3 km Southwest, near İYTE-1, 30.03.2018, 38°17'48"N, 26°37'47"E, 53 m.

World distribution: Europe, Türkiye, Russia (Europe to South Siberia), China.

Family **Thomisidae** Sundevall, 1833

Genus Bassaniodes Pocock, 1903

Bassaniodes cribratus (Simon, 1885) (Fig. 22)

Material examined: $2 \circlearrowleft \circlearrowleft$, Karaburun, 19.12.2008, 38°21'02"N, 26°38'20"E, 8 m, leg. Yağmur. $1 \circlearrowleft$, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. $1 \circlearrowleft$, Çeşme, near Alaçatı Dam, 03.02.2017-20.05.2017, 38°16'54"N, 26°26'14"E, 103 m. World distribution: Mediterranean, Russia (Europe), Türkiye, Caucasus, Iran, China, Korea.



Fig. 22. *Bassaniodes cribratus* (Simon, 1885). A-B. habitus, dorsal view. A. ♀. B. ♂. C. ♀ epigyne, ventral view. D. ♂ pedipalp, ventral view.

Genus Cozyptila Lehtinen & Marusik, 2005

Cozyptila blackwalli (Simon, 1875)

Material examined: 1, Karaburun, Parlak Village, 02.02.2017-28.06.2017, 38°37'34"N, 26°23'21"E, 258 m, PF. 2, Karaburun, Center, 8 km Southwest, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m.

World distribution: Europe.

Cozyptila nigristernum (Dalmas, 1922)

Material examined: 1♀, Karaburun, Center, 8 km Southwest, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m.

World distribution: Italy, Albania, Bulgaria, Greece, Cyprus, Türkiye, Ukraine.

Genus Heriaeus Simon, 1875

Heriaeus hirtus (Latreille, 1819)

Material examined: 5♂♂, Urla, Zeytinler Village, 6 km East, 38°26'48"N, 26°37'43"E, 56 m, 20.05.2017; 1♀, Çeşme, Germiyan Village road junction, 38°18'00"N, 26°28'45"E, 112 m, 28.06.2017.

World distribution: Europe, Türkiye, Caucasus.

Genus Ozyptila Simon, 1864

Ozyptila confluens (C.L. Koch, 1845)

Material examined: 1♀, 6♂♂, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m. 5♂♂, Karaburun, Center, 3 km Southwest, 31.03.2018, 38°37'38"N, 26°29'22"E, 436 m. 3♂♂, Karaburun, Bozköy Village-2, 01.04.2018, 38°36'59"N, 26°28'05"E, 102 m. 1♂, Çeşme, Ildır Village road junction, 30.03.2018, 38°18'00"N, 26°28'45"E, 112 m.

World distribution: Southern Europe, Syria.

Ozyptila sanctuaria (O. Pickard-Cambridge, 1871)

Material examined: 1♀, Urla, Gülbahçe Neighbourhood, 3 km Southwest, 19.03.2017-20.05.2017, 38°17'48"N, 26°37'47"E, 56 m, PF.

World distribution: Europe.

Genus Spiracme Menge, 1876

Spiracme striatipes (L. Koch, 1870)

Material examined: 1♀, Karaburun, Sazak Village, 31.03.2018, 38°37'34"N, 26°23'21"E, 258 m.

World distribution: Europe, Türkiye, Caucasus, Russia (Europe) to Central Asia, Iran, China.

Genus Xysticus C.L. Koch, 1835

Xysticus abditus Logunov, 2006

Material examined: 1♂, Karaburun, Center, 8 km South, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m.

World distribution: Bulgaria, Türkiye.

Xysticus audax (Schrank, 1803)

Material examined: 1\$\operatorname{1}\$, Karaburun, Center, 8 km South, 17.12.2016-14.05.2017, 38°35'52"N, 26°29'59"E, 664 m, PF.

World distribution: Europe, Türkiye, Caucasus, Russia (Europe to Far East), Kazakhstan, Iran, Korea, Japan.

Family **Trachelidae** Simon, 1897

Genus Paratrachelas Kovblyuk & Nadolny, 2009

Paratrachelas maculatus (Thorell, 1875)

Material examined: 1♀, Urla, Zeytinler Village, 2 km Southwest, 19.03.2017-20.05.2017, 38°16′30″N, 26°35′07″E, 135 m, PF.

World distribution: France to Ukraine, Türkiye, Israel.

Family **Zodariidae** Thorell, 1881 Genus **Zodarion** Walckenaer, 1826 **Zodarion thoni** Nosek, 1905 Material examined: 1♀, Urla, Gülbahçe Neighbourhood, 31.03.2018, 38°21'13"N, 26°38'19"E, 31 m. 1♀, Karaburun, Center, 8 km Southwest, 31.03.2018, 38°35'52"N, 26°29'59"E, 664 m.

World distribution: Eastern Europe, Cyprus, Türkiye, Caucasus, Lebanon.

Acknowledgments

The present study is derived from the master thesis of Oğuz Tutar approved by the Institute of Natural Sciences of Manisa Celal Bayar University in August 2019. We thank Kaan Yılmaz for the help in the field trips, Rahşen S. Kaya, Gökhan Gündüz and Kadir Boğaç Kunt for identifying specimens.

References

Danışman, T., Kunt, K.B. & Özkütük, R.S. 2023. *The Checklist of the Spiders of Turkey*. Version 2022, online at http://www.spidersofturkey.info, accessed on 05.02.2023.

Kaya R.S., Kunt K.B., Marusik Y.M., Yağmur E.A. 2010. The first record of genus *Argyrodes* Simon, 1864 (Araneae: Theridiidae) from Turkey. *Serket*, 12(1): 7-12.

Kunt, K.B., Kaya, R.S., Özkütük, R.S., Danışman, T., Yağmur, E.A., Elverici, M. 2012. Additional notes on the spider fauna of Turkey (Araneae). *Turkish Journal of Zoology*, 36(5): 637-651.

Logunov, D.V. & Kunt, K.B. 2010. Taxonomic-faunistic notes on the Philodromidae (Aranei) of Turkey. *Arthropoda Selecta*, 19(1): 11-20.

Özkütük, R.S., Marusik, Y.M., Danışman, T., Kunt, K.B., Yağmur, E.A., Elverici, M. 2013. Genus *Scytodes* Latreille, 1804 in Turkey (Araneae, Scytodidae). *Hacettepe Journal of Biology and Chemistry*, 41(1): 9-20.

Tanasevitch, A.V. 2011. On linyphiid spiders from the eastern and central Mediterranean kept at the Muséum d'histoire naturelle, Geneva. *Revue Suisse de Zoologie*, 118(1): 49-91.

World Spider Catalog 2023. *World Spider Catalog*. Version 24. Natural History Museum Bern, online at http://wsc.nmbe.ch, accessed on 06.02.2023.

Argiope lobata (Pallas, 1772) in Jordan (Araneae: Araneidae)

Hisham K. El-Hennawy
41 El-Manteqa El-Rabia St., Heliopolis, Cairo 11341, Egypt
E-mail: el_hennawy@hotmail.com

Abstract

Argiope lobata (Pallas, 1772) of family Araneidae is recorded from Jordan. Only one female specimen of this species was collected in September 1989 from Abdoun, Amman, Jordan.

Keywords: Araneae, Araneidae, Argiope lobata, Jordan.

Introduction

Family Araneidae Clerck, 1757 includes 188 genera, 3118 species (and subspecies) distributed all over the world. Genus *Argiope* Savigny, 1825 [*Argyope*] includes 85 species + 3 subspecies throughout the world (World Spider Catalog, 2023).

Argiope lobata (Pallas, 1772) is known from: Southern Europe to Central Asia and China, northern Africa, Tanzania, South Africa, Palestine-Israel, Pakistan, India, from Myanmar to New Caledonia and northern Australia (World Spider Catalog, 2023).

A beautiful photograph of *Argiope* sp. was published in the "Field guide to Jordan" (Maani, 2010). It is evident that this photograph, taken by Habeeb Maani, belongs to *A. lobata* (Fig. 1).

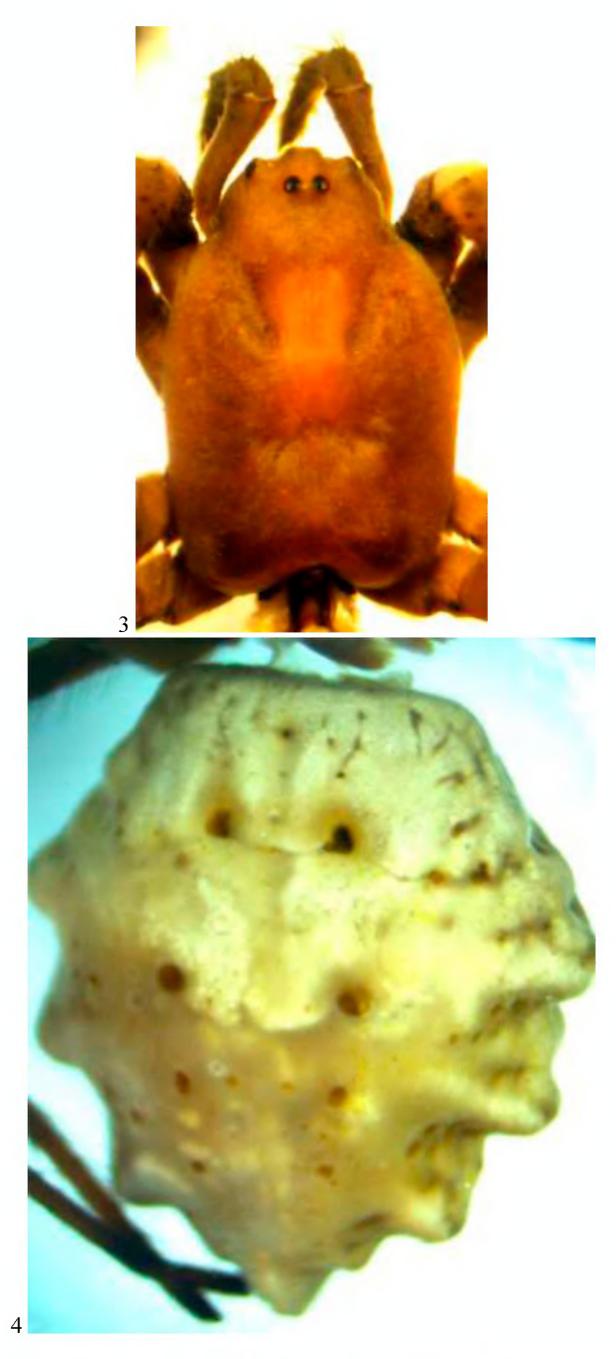
One female specimen of *Argiope lobata* was collected in September 1989 from Abdoun, Amman, Jordan when this region was not crowded by buildings as seen today. Nowadays, "Abdoun is a residential area of Amman, Jordan. Abdoun is considered by many to be the most affluent district of the city, and is located towards the south of the city. Some of Jordan's most expensive real estate is located in the district" (Wikipedia, 2023).



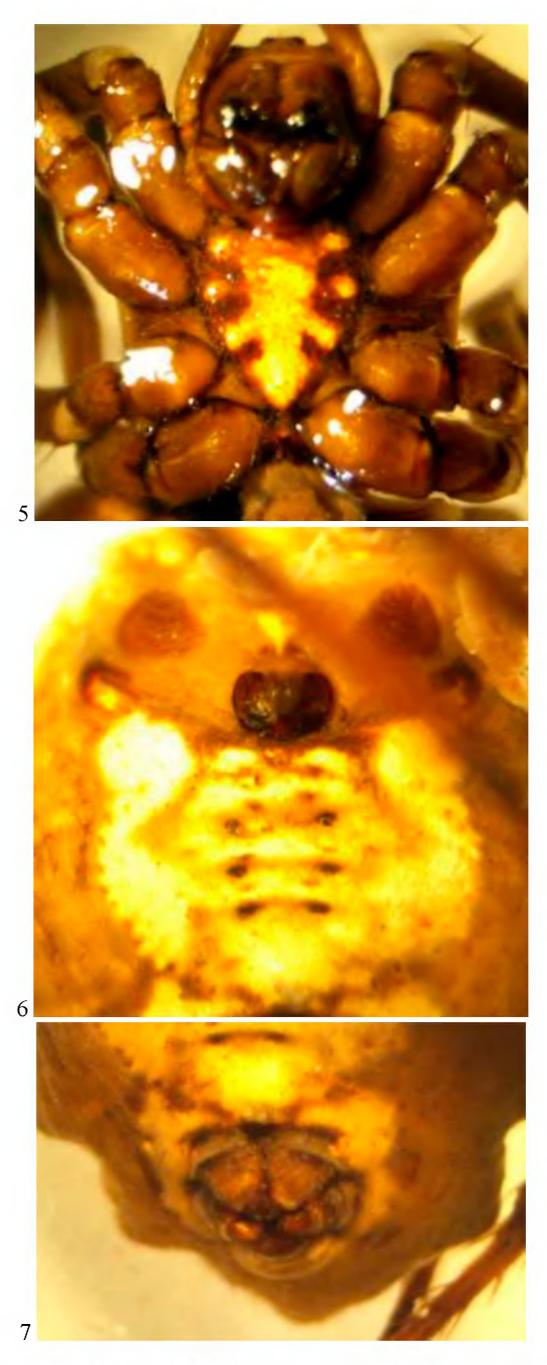
Fig. 1. *Argiope* sp. on its web (© Habeeb Maani). Published in the "*Field guide to Jordan*" (Maani, 2010).



Fig. 2. Argiope lobata (Pallas, 1772) ♀, habitus, dorsal view (preserved in 1987).



Figs. 3-4. *Argiope lobata* (Pallas, 1772) ♀, dorsal view. 3. Cephalothorax. 4. Abdomen.



Figs. 5-7. *Argiope lobata* (Pallas, 1772) ♀, ventral view. 5. Sternum. 6. Abdomen (part). 7. Spinnerets.

Family Araneidae Clerck, 1757 Genus Argiope Savigny, 1825 Argiope lobata (Pallas, 1772) (Figs. 2-8)

Material examined. Jordan, 1 (Fig. 2), Abdoun, south of Amman (about 31°57'N, 35°53'E, elev. 919 m), 23 September 1987, leg. Hisham K. El-Hennawy [ACE.1987.09.23.AR.001. JOR]. (ACE = Arachnid Collection of Egypt)

Measurements (in millimetres): Total length 19.0; Cephalothorax length 7.0, width 5.8 (Fig. 3); Abdomen length 12.0 (Fig. 4).

For identification and description of *Argiope lobata* see Nentwig *et al.* (2023: https://araneae.nmbe.ch/data/739/Argiope lobata).

For taxonomic references see World Spider Catalog (2023: https://wsc.nmbe.ch/species/3347/Argiope lobata).

Table 1. Measurements of leg segments of *Argiope lobata* (\mathfrak{P}).

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	9.5	3.0	7.0	10.3	2.3	32.1
II	10.0	3.0	6.5	10.0	2.5	32.0
Ш	6.0	2.3	3.5	5.5	1.9	19.2
IV	10.0	2.8	5.8	10.0	2.3	30.9

Legs 1243 Epigynum (Figs. 6, 8).

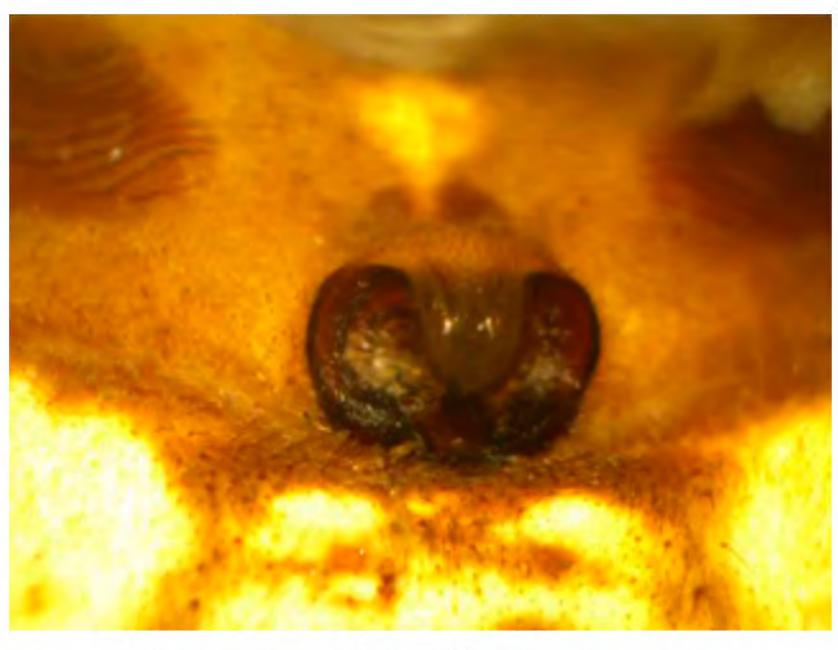


Fig. 8. Argiope lobata (Pallas, 1772) ♀, Epigynum, ventral view.

References

Maani, J. 2010. Field guide to Jordan. 2nd Ed., 3rd printing. 336 pp.

Nentwig, W., Blick, T., Bosmans, R., Gloor, D., Hänggi, A. & Kropf, C. 2023 *Spiders of Europe*. Version 04.2023. Online at https://www.araneae.nmbe.ch, accessed on 27 April 2023.

Wikipedia 2023. Abdoun neighbourhood. https://en.wikipedia.org/wiki/Abdoun_neighborhood.

World Spider Catalog 2023. *World Spider Catalog*. Version 24. Natural History Museum Bern, online at http://wsc.nmbe.ch, accessed on 27 April 2023.